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Stigmatization as a Barrier to Help-Seeking Among Individuals Who Engage in Non-Suicidal Self-Injury

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**STIGMATIZATION AS A BARRIER TO HELP-SEEKING AMONG
INDIVIDUALS WHO ENGAGE IN NON-SUICIDAL SELF-INJURY**

by

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B A May 2007, Point Loma Nazarene University

A Thesis Submitted to the Faculty of
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ABSTRACT

STIGMATIZATION AS A BARRIER TO HELP-SEEKING AMONG INDIVIDUALS WHO ENGAGE IN NON-SUICIDAL SELF-INJURY

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Old Dominion University, 2011
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Non-suicidal self-injury (NSSI) is the deliberate destruction of body tissue without the intent to commit suicide. The present study applied public stigma, self stigma, and secrecy of Modified Labeling Theory to NSSI help seeking and psychological well-being.

Results from 576 adult women indicate that satisfaction with mental health providers is higher than with medical providers, that stigma was not higher among those who haven't sought help, and that past and future help seeking are related. Neither public nor self stigma predicted help-seeking, and the relationship between stigma and psychological well-being is not mediated by secrecy. The most salient constructs associated with help seeking were secrecy and desire to stop self-harm. Future directions and clinical implications are discussed.

This thesis is dedicated to all individuals who hurt themselves because their suffering is too great to bear

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CHAPTER I

INTRODUCTION

Definition and Description of NSSI

Non-suicidal self-injury (NSSI) is the deliberate damage of body tissue without a conscious desire to commit suicide (Favazza, 1998). The most frequent forms of self-harm are cutting (Laye-Gindhu, & Schonert-Reichl, 2005; Muehlenkamp, Hoff, Licht, Azure, & Hasenzahl, 2008), carving words or images (Brown, Williams, & Collins, 2007; Muehlenkamp et al., 2008), hitting, and burning (Klonsky & Glenn, 2008). Other common forms are biting (Lloyd-Richardson, Perrine, Dierker, & Kelley, 2007), as well as head banging, scratching, and poking with sharp objects (Brown et al., 2007). In addition, NSSI can include interfering with healing of wounds (Brown et al., 2007; Klonsky et al., 2008), pulling out body or facial hair, as well as highly extreme forms, such as genital mutilation or use of very hot enemas (Briere & Gil, 1998). The spectrum of injury severity ranges from moderate/severe forms of self-harm (such as cutting and burning) to more minor forms of self-harm, such as hair pulling or skin picking (Lloyd-Richardson et al., 2007). Additionally, some researchers have examined behaviors such as excessive substance use, substance use outside of therapeutic recommendation, and ingestion of non-edible objects as forms of self-harm (Evans, Hawton, & Rodham, 2005), however, other researchers have excluded these behaviors from “self-harm,” as they are not direct forms of destructing body tissue (Gratz, 2001).

The model for this thesis is *Journal of Mental Health*

Importance of Researching NSSI

Although many NSSI methods are not lethal, self-injurious behaviors still pose a serious danger, as individuals who self injure may not seek any help or medical attention (Evans, et al , 2005, Whitlock, Eckenrode, & Silverman, 2006), often report harming themselves more severely than they had expected (Whitlock et al , 2006), and deliberately plan to harm themselves NSSI is also associated with a greater degree of suicidality (Klonsky & Olino, 2008), such that 7% to 10% of self injurers reported that one or more of the NSSI incidents in past year was a suicide attempt (Hilt, Nock, Lloyd-Richardson, & Prinstein, 2008, Lloyd-Richardson, Perrine, Dierker, & Kelley, 2007), and 56-83% of self-harmers reported suicidal ideation (Brown, Williams, & Collins, 2007, Laye-Gindhu, & Schonert-Reichl, 2005)

Rates of NSSI

Reported rates of NSSI have quite a bit of variation For example, one study found that 46.5% of adolescents ($N = 633$, Lloyd-Richardson et al , 2007) report self-harm, whereas in a different study, 7% of high school aged adolescents report deliberate self-harm (Evans et al , 2005) Among college students, rates of reported lifetime history of NSSI vary from 35% (mean age of 23.9, Gratz 2001) to 27% (mean age of 19.4, Brown et al , 2007) Rates of young adults who have harmed within the last year also vary from 10.6% (Muehlenkamp et al , 2008) to 1.2% (Whitlock et al , 2006) Among clinical populations, Briere and Gil (1998) found that 4% of trauma victims (mean age of 46) and 21% of psychiatric patients reported engaging in at least one instance of NSSI in the last 6 months

Comorbidity

NSSI is associated with a variety of psychological diagnoses, such as depression and other mood disorders (Laye-Gindhu, & Schonert-Reichl, 2005, Swanell, Martin, Scott, Gibbons, & Gifford, 2008), borderline personality disorder symptoms and anxiety (Klonsky & Olino, 2008), post-traumatic stress disorder (Briere & Gil, 1998), and eating disorder behaviors as well as poor body image (Hilt et al , 2008, Whitlock et al , 2006) Additionally, NSSI has been linked to a history of physical and emotional abuse (Whitlock et al , 2006), sexual abuse (Briere et al , 1998), and exposure to NSSI in other individuals (Muehlenkamp, Hoff, Licht, Azure, & Hasenzahl, 2008) Individuals with a history of NSSI are also more likely to report drug use and underage drinking (Evans et al , 2005, Hilt et al , 2008, Laye-Gindhu, & Schonert-Reichl, 2005), have a strong implicit identification with self-harm and high pain tolerance (Nock, 2009), and are also more likely to be either bisexual or question their sexual orientation (Whitlock et al , 2006) Teens who engage in self-harm also report having lower parental quality ratings, such as trust and communication (Hilt et al , 2008)

Functions of NSSI

According to Nock and Prinstein's (2004) model of self-injurious behavior, when an individual harms to reduce tension or negative affective states, the self-injurious behavior functions under automatic-negative reinforcement The behavior becomes self-reinforced and facilitates in the removal of an aversive stimulus Further, individuals who engage in NSSI to reduce negative emotions also engage in more thought suppression, which is deliberately trying to not think about unwanted thoughts (Najmi, Wegner, &

Nock, 2007) Those who self-harm most frequently report that they do so for emotional regulation/modulation (Laye-Gindhu, & Schonert-Reichl, 2005, Swanell, Martin, Scott, Gibbons, & Gifford, 2008) Reported reasons for NSSI include “to stop bad feelings” (Lloyd-Richardson et al , 2007), “to distract from emotional pain by experiencing physical pain” (endorsed by 92% of participants, Swanell et al , 2008) and “to distract from painful feelings” (Briere & Gil, 1998) As part of affect regulation, individuals aim to reduce negative feelings, such as that of guilt, shame, and depression, which often seem overwhelming (Swanell et al , 2008) Among patients diagnosed with Borderline Personality Disorder (BPD), these behaviors are performed as an attempt to find relief from very intense emotional states, functioning as a method of controlling emotions or making them concrete and visible (Gunderson & Hoffman, 2005) Ironically, individuals often report an increase in a sense of guilt and shame following self-harm (Briere & Gil, 1998, Laye-Gindhu, & Schonert-Reichl, 2005), and those who self-harmed recently report greater levels of guilt than those who harmed in the past or never harmed (Brown, Williams, & Collins, 2007) In addition to emotion regulation, individuals engage in NSSI to communicate with or influence others, to punish themselves, to experience excitement or sensation seeking, to act as a form of anti-disassociation, to feel control or affirm personal boundaries, to avoid suicide, and due to psychoses/lack of insight (Klonsky & Muehlenkamp, 2007, Laye-Gindhu, & Schonert-Reichl, 2005, Lloyd-Richardson et al , 2007, Swanell et al , 2008) Although NSSI is often misperceived as a form of attention seeking, individuals who self-harm report doing so for emotional regulation more frequently than engaging in NSSI to influence the behavior of other people (Nock et al , 2004)

Difficulty in Treating NSSI

Helping individuals recover from NSSI poses many challenges. Even when individuals are aware of the most effective ways of coping with their urges to self-harm, such as physical exercise, removing the instrument/means of self-harm, and finding someone understanding to talk to, these are not the most commonly used strategies (Klonsky & Glenn, 2008). Further, those who self-harm have been found to be less likely to talk to someone about their problems (Evans et al., 2005). In turn, those who contemplate self-harm are also less likely to cope by communicating with others when compared to individuals who do not harm, despite reporting having major problems (Evans et al., 2005). Thus, the treatment of NSSI should not only include the most effective methods of reducing self-injury, but also should involve teaching alternative coping skills (Briere & Gil, 1998). For example, developing better communication and problem solving skills are effective in helping individuals who self-harm better respond to stressful events (Nock, 2009). A comprehensive form of therapy involving skill building is an essential component to recovery, such as Dialectical Behavioral Therapy and Problem-Solving Therapy (Meuhlenkamp, 2006).

Help-seeking in NSSI population

Rates of seeking help among those who engage in NSSI vary. A study in New Zealand found that only 26% of individuals sought formal help-seeking for self-harm (Nada-Raja, Morrison, & Skegg, 2003), attitudinal barriers such as embarrassment, thinking that no one can help, and that no help was necessary were most common reasons for not seeking help. Gollust, Eisenberg, and Golberstien (2008) found that only 26% of individuals who self-harmed received therapy or medication. In a different study, 46% of

individuals who self-harm reported that they got help prior to harming, and 55% reported getting help after engaging in self-harm (Evans, et al , 2005) In comparison to those who did not engage in NSSI but thought about it, those who did engage in NSSI reported more major life problems with fewer attempts to seek help (Evans et al , 2005) Additionally, believing that treatment is effective and having contact with users of mental health services are associated with lower perceptions of stigmatization (Golberstein, Eisenberg, & Gollust, 2008) Therefore, perceived stigma may explain why some individuals do not seek assistance and treatment for NSSI behaviors

Treatment for Physical Injury

In addition to psychological help for NSSI, treatment of physical injuries also warrants important consideration Engaging in NSSI may result in serious injury 47% of individuals who reported self-injury indicated that they had injured themselves more severely than expected on at least one occasion, and 25 4% of those who harmed repeatedly indicated they had hurt themselves badly enough to have required medical attention (Whitlock et al , 2006) Yet, 31% of individuals who endorsed a history of repeated self-harm reported that no one was aware of their self-harm behavior, with only 5 4% of these individuals having disclosed to a medical health professional and only 25 7% having disclosed to a mental health professional (Whitlock et al , 2006) Only 6 5% of all individuals with a history of self-harm reported ever seeking medical attention for their injuries (Whitlock et al , 2006) There is an important need to treat possible infections and address the use of unsanitary tools (Hoffman & Kress, 2008) Also, without appropriate methods of wound closures, there is a heightened risk of delayed healing and increased scarring (Tanner, 2007)

General Health Maintenance

Not only are those who engage in NSSI less likely to seek treatment for self-injurious behavior, but they are also more likely to die from general health problems. In a longitudinal follow up of 11583 patients (Hawton, Harriss, & Zahl, 2006), deliberate self-harm more than doubled the risk of dying during the follow up period and was significantly associated with higher rates of death from respiratory, circulatory, and digestive disease (such as diabetes), skin conditions, epilepsy, and accidents. Rate of suicide among those who engaged in deliberate self-harm was also found to be 17 times higher than in the general population. Although risky health behaviors and general health problems co-morbid to self-harm were discussed by the authors (Hawton et al, 2006), perhaps patients who had engaged in deliberate self-harm were more likely to die because they did not seek adequate general health care treatment. Because researchers have demonstrated a low rate of seeking professional help for NSSI, stigmatizing events and previous bad experiences with healthcare providers may explain the lack of help-seeking and treatment avoidance.

Stigma and Reactions Towards Individuals Who Self-Harm

Medical and mental health professionals, such as general practitioners or emergency room staff- may be one of the first points of contact for an individual who self-injures, thus the reactions of such staff members may be a critical component to future treatment seeking on behalf of the patient. Various studies have examined individual perceptions and emotional reactions towards self-injurious behavior and toward individuals who engage in self-harm. For example, self-injurious behavior in the prison population is viewed by medical and mental health staff as a form of manipulation,

reporting reactions of shock, anger, burn-out, nausea, and lack of training when dealing with self-harm situations (DeHart, Smith, & Kaminski, 2009) Doctors who perceive self-harm to be manipulative report that they are less likely to spend time with the client and may even ask other staff to see the patient (Hadfield, Brown, Pembroke, & Hayward, 2009) Interview responses from clients who engaged in self-harm indicated that clients feeling misunderstood by staff, whereas staff in said treatment environment reported feeling guilty and responsible when self-harm incidents occurred (Duperouzel & Fish, 2008)

Medical Professional's Stigma Toward NSSI

Using a study of hypothetical vignettes, Mackay and Barrowclough (2005) found that emergency room medical staff reported greater levels of irritation, less optimism about their ability to help, and less willingness to help individuals presenting with self-harm than nurses Male medical staff reported greater irritation and frustration and less sympathy than females Additionally, perceived self-harm controllability was associated with less sympathy, greater negative reactions, and reduced willingness to help (Mackay & Barrowclough, 2005)

Further, the perception that the self-harm was likely to be repeated was associated with less staff optimism and reduced helping behavior, this was also confirmed through an interview study with emergency room doctors, who reported a sense of urgency in treating those presenting with their first episode of self-harm and sense of helplessness and frustration with those who have harmed repeatedly (Hadfield, Brown, Pembroke, & Hayward, 2009) Both nurses and doctors report feeling incompetent, uncomfortable, and unprepared to work with clients who engage in self-injury, and were reluctant to discuss

reasons for self-harm with the client (Hadfield, Brown, Pembroke, & Hayward, 2009, Smith, 2002)

General Stigma Toward NSSI

Medical professionals are not alone in their negative reactions towards NSSI. Psychiatric patients view other clients that self-harm as difficult to treat patients (Gallop, Lancee, & Shugar, 1993), further stigmatizing those who engage in NSSI. Parents of adolescents who self-harm report feeling shock, disappointment, guilt, fear, and a sense of helplessness upon receiving confirmation of the self-injurious behavior (Oldershaw, Richards, Simic, & Schmidt, 2008), and parent reactions may be an important factor in reducing NSSI. Although some researchers have found that individuals favorably rate support from family members (Nada-Raja et al , 2003, Fortune, Sinclair, & Hawton, 2008), one study demonstrated that parents were perceived as least helpful-even harmful-in reducing self-harm (Ryan et al , 2008). Negative reactions are also evident among the general public, as compared to direct care staff, university students were more likely to have negative emotional reactions towards self-injurious behavior among those with intellectual disabilities (Hastings, Tombs, Monzani, & Boulton, 2003). In sum, research demonstrates that NSSI evokes negative reactions from medical professionals and community members alike, which suggests a high degree of stigmatization toward this population.

How Individuals Who Engage in NSSI View Their Treatment

Negative reactions by healthcare professionals toward individuals who engage in NSSI not only could result in suboptimal treatment, but also could unintentionally increase perceived stigmatization, thus creating a barrier to future help-seeking. Further,

individuals who engage in NSSI often have negative reactions towards their treatment. After examining the content of self-injury related discussion boards, Whitlock et al (2006) found that 18.7% of formal help-seeking posts contained active discouragement from seeking therapy and reporting negative attitudes towards treatment. Individuals who have sought formal help for self-harm also report the greatest levels of dissatisfaction with psychiatrists, nurses and doctors compared to therapists and self-harm specialists (Warm, Murray, & Fox, 2002). A recent meta-analysis of clinical services for individuals that self-harm found that many participants had negative perceptions and reactions to their treatment, care management, discharge, assessment, and physical treatment. Suggested areas of improvement included improving communication between care providers and clients, increasing general staff knowledge about self-harm and necessary care, increasing sympathy towards clients, improving access to after-care and mental health services, and providing additional information for clients, providers, and the general public to improve care and reduce stigmatization (Taylor, Hawton, Fortune, & Kapur, 2009).

Therefore, extant research suggests a series of misconceptions regarding individuals who self-harm: that the behavior is a form of manipulation and attention seeking, that the behavior may be controllable, and that individuals cannot be effectively helped. Further, medical professionals and community members alike report negative reactions toward and feel inadequately prepared for assisting clients with NSSI. In turn, individuals who self-harm are frequently dissatisfied with their treatment experiences (e.g., Warm et al., 2002), and therefore may prefer not to come in contact with treatment professionals. In fact, research consistently shows that those who engage in NSSI are

more likely to seek informal help, preferring friends over any other form of support (Evans et al , 2005, Fortune, Sinclair, & Hawton, 2008, Nada-Raja et al , 2003, Ryan, Heath, Fischer, & Young, 2008) Unfortunately, it has also been established that the most common forms of coping, such as being around friends, may not be the most effective at reducing NSSI behaviors (Klonsky & Glenn, 2008)

However, the preference for informal help-seeking may be due to dissatisfaction or negative assumptions related to formal treatment and anticipation of stigmatization Individuals who self-harm may internalize the negative reactions of the public, including treatment providers, and experience the consequences associated with being a stigmatized member of society

Stigma and Labeling Theory

The stigma that individuals can experience can be examined from two perspectives public stigma and self stigma Public stigma is the way that the public may react or behave towards a person belonging to the stigmatized group, self stigma, on the other hand, is a form of self-prejudice, or the way the individuals in the stigmatized group may react if they internalize that the general public may stigmatize them (Corrigan, 2004) Modified Labeling Theory (Link, Struening, Cullen, Shrout, & Dohrenwend, 1989) suggests that an individual can experience stigma even when their “undesirable characteristics” are hidden from public view through a mechanism of labeling Accordingly, a person internalizes a specific conceptualization regarding a stigmatized population, with attention to attitudes, behaviors and attributions associated with the group Specifically, beliefs are formed about the extent to which the stigmatized group will be devalued and discriminated against by people outside of the stigmatized

population. Once a person considers themselves as “labeled,” they may respond with *secrecy*, or hiding their status, and *withdrawal*, or reducing interaction with the general community to those associated with the same label. As such, recognition of membership in a stigmatized population can lead to long lasting negative consequences and may even contribute additional psychological risk (Link et al , 1989, Link, Struening, Rahav, Phelan, & Nuttbrock, 1997). For example, among adolescents who were receiving psychiatric services, the degree to which mental illness labels were self applied was negatively associated with measures of psychological well being, such as depression and mastery (Moses, 2009b).

Mental Health Stigma and Help-seeking

Individuals who have psychiatric symptoms or require psychiatric services also belong to a stigmatized group. Studies have shown that the general public perceives those with a mental illness as dangerous and having a potential for violence, and subsequently report a desire to distance themselves socially from those who have mental illness symptoms (Link, Bresnahan, Stueve, & Pescosolido, 1999). The problem of stigmatization as a barrier to mental health treatment has been confirmed in empirical research, such as in the case of delaying treatment for Obsessive Compulsive Disorder due to feeling ashamed and fearing stigma (Belloch, del Valle, Morillo, Carrío, & Cabedo, 2009). In a study of hypothetical depression scenarios, anticipated stigmatization from friends and family members feelings of shame were associated with lower acceptance of mental health services (Givens, Katz, Bellamy, & Homes, 2007). Greater perceived stigma was also negatively associated with perceived need for mental health help among young adults aged 18-22 (Golberstein et al , 2008). In older adults,

both public and self stigma were negatively associated with positive attitudes towards seeking mental health services (Conner, Koeske, & Brown, 2009) Among individuals who stigmatize themselves regarding seeking mental health treatment, this stigma uniquely predicted help-seeking attitudes and help-seeking intentions, and individuals with greater perceived self stigma had less positive attitudes towards seeking treatment and lower intentions to seek psychological treatment (Vogel, Wade, & Haake, 2006) Avoiding treatment becomes a method by which people can deny that they are part of a stigmatized group (Corrigan, 2004) It follows that stigma would impact help-seeking behavior among individuals who engage in NSSI

Consequences of Stigma: Devaluation/ Discrimination

As part of the labeling and stigmatization process, a person may be subjected to certain social inequalities connected to their labeled status The internalization of the label contributes to an individual's belief that other people will treat them differently, judge them, and that their own status in society is threatened as a result of being associated as belonging to an undesirable group (Link, Struening, Neese-Todd, Amussen, & Phelan, 2001, Link, Yang, Phelan, & Collins, 2004) One measure of public stigma is assessing an individual's perception of the degree to which others will devalue or discriminate them due to their association with a stereotyped group Perceptions of devaluation can include the anticipation of a status loss, and examples of perceived discrimination include anticipating rejection of a job, being refused an apartment, and other social inequalities (Link & Phelan, 2001) This perception of public stigma is sufficient enough to have consequences, even if a person does not actually experience such forms of discrimination (Link & Phelan, 2001) The degree to which a person

perceives they will be devalued and discriminated predicts future psychological, social interactions, and potential for support networks. For example, among adolescents receiving mental health treatment, perceived devaluation and discrimination was significantly associated with self-esteem, and remained a significant predictor with the inclusion of depressive symptoms as a predictor (Moses, 2009a)

With greater stigma concern, an individual would rely more on familial support, and those who had not had a substantial stigma-inducing experience, their social network may dilute the effects of stigma (Link et al, 1989). In the case of individuals who self-harm, particularly those who may prefer not to turn to family for support (Ryan et al, 2008), the effect of perceived stigmatization may leave them ultimately alone with their problems and further exacerbate psychological distress. In turn, psychological symptoms of depression are associated with a history of suicide attempts (Culp, Clyman, & Culp, 1995)

Coping with Stigma

Further, it is possible to examine whether the individual will cope with their stigmatized status using *secrecy* and *withdrawal* (Link et al, 1989). Withdrawal refers to the extent to which people endorse limiting and avoiding social interactions. Secrecy indicates the degree to which an individual attempts to conceal their membership to a stigmatized group as a means of avoiding future rejection (Link et al, 2004). These two forms of coping are associated with both public and self stigma. For example, when assessing public stigma using the perceived devaluation-discrimination scale, a positive association with withdrawal was found, such that individuals who believed that patients are discriminated against and devalued were more likely to cope using withdrawal. Such

methods of coping not only impact self esteem and social isolation, but also influence psychological functioning (Corrigan, 2004, Link & Phelan, 2001) Both public stigma and the coping mechanism of withdrawal (individually and combined) were significant unique predictors of lower self esteem, even when controlling for depressive symptoms (Link, Struening, Neese-Todd, Amussen, & Phelan, 2001) Also, when examining self stigma in adolescents (including the degree of discomfort or shame about their group membership), higher levels of self stigma were associated with coping using secrecy (Moses, 2009a) These findings suggest that individuals who engage in NSSI would perceive both public and self stigma, which, in turn, should lead to secrecy as a form of coping

Secrecy in NSSI

Individuals who engage in NSSI are known to engage in a variety of concealment behaviors simply to prevent the discovery of their injuries Teens who self-harm dress in long sleeves and pants, often inappropriate to weather, and avoid contact or exposure of their skin in an attempt to hide their self-injury (Deroun & Bravender, 2004) Self-injurious behavior often occurs in areas that can be easily hidden by clothing, such as wrists, legs, inner thighs, bra/panty line, armpits, calves, and feet (Hicks & Hinck, 2007) Participants disclose that when a particular injury site is discovered, they may start harming a new or different part of their body that would not be checked (Rissanen, Kylma, & Laukkanen 2008) Similarly, Austin and Kortum (2004) describe “critical to the victim is concealment of self-injury By keeping self injuries away from peering eyes, the adolescent can increase the ability to do it more often without interruption” (p 518) The context of self-injury is often private, and resulting wounds and disfigurement

are attributed to accidental causes (Briere & Gil, 1998) Hyman (1999) writes, “concealing any resulting scars or other signs of injury is crucial and party dictates their daily routines, choice of clothes, and choices of appropriate lie to excuse any trace of injury that have to remain visible” (p 1)

Secrecy may be even more prevalent among individuals who utilize self-harm discussion boards, where ideas about concealment are openly discussed In reviewing content of self-harm discussion boards, Whitlock et al (2006) found that threads related to concealing self-injury and covering up cuts and scars are quite common, often occurring more frequently than posts related to help-seeking Those who self-harm also associate revealing their scars with a risk of ostracism (Stone & Sias, 2003) Therefore, secrecy is a construct that seems particularly important to individuals who engage in NSSI, and may be associated with both stigma and help-seeking behavior

Proposed Study

Although there is evidence of stigmatization toward those who engage in NSSI, labeling theory has not been applied specifically to individuals who self-harm Perceived public stigma, self stigma, and coping with such stigma have critical clinical implications that have remained unexamined among individuals who engage in NSSI Given the established role of stigma in help-seeking delay and avoidance, I intended to apply a modified version of labeling theory to individuals who engage in NSSI in order to demonstrate the extent that perceived stigmatization is a barrier of formal help-seeking Further, I intended to examine the degree to which the relationship between stigma and help-seeking is mediated by coping using secrecy, as secrecy plays a role in NSSI Therefore, the goal of the present research study was to characterize the pervasiveness

and consequences of stigma towards individuals who engage in NSSI in order to understand help-seeking behavior for this population

Hypotheses

First, in accordance with previous research (Warm et al , 2002), I hypothesized that individuals who have sought help for NSSI would report lower satisfaction with medical staff as compared to mental health staff. Secondly, I hypothesized that among individuals who have sought professional help in the past, satisfaction with previous help-seeking experiences would be positively associated with help-seeking intentions. Third, given the previously established association between stigmatization and coping with stigma using secrecy (e.g., Corrigan, 2004, Link et al , 1989), I hypothesized that individuals who endorse greater stigma would also endorse greater coping using secrecy. Fourth, in accordance with Modified Labeling Theory, individuals who have never had contact with a treatment provider should have not experienced "labeling," and therefore would not suffer the consequences of stigmatization. Therefore, I hypothesized that individuals who have never sought any form of treatment would score lower on the public and self stigma than individuals who have sought treatment in the past. Fifth, I hypothesized that perceived public stigma and self stigma would predict help-seeking, and that this relationship will be mediated through secrecy (concealment). This relationship was examined separately for medical and mental health help-seeking (see Figures 1-4)

Figure 1 Conceptual Model Predicting Mental Health Help-seeking from Public Stigma and Secrecy

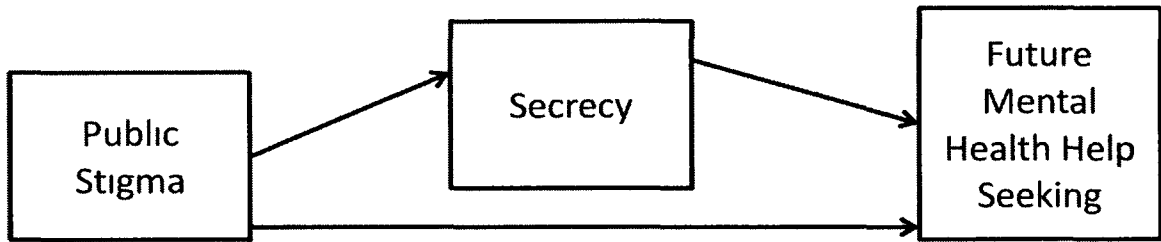


Figure 2 Conceptual Model Predicting Medical Help-Seeking from Public Stigma and Secrecy

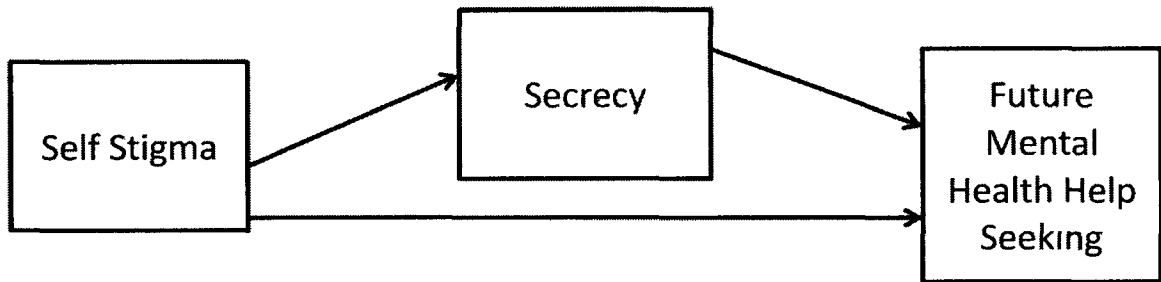


Figure 3 Conceptual Model Predicting Mental Health Help-Seeking from Self-Stigma and Secrecy

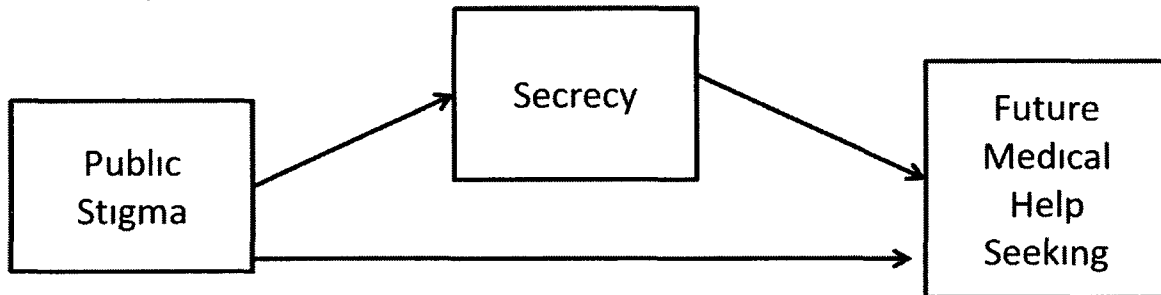
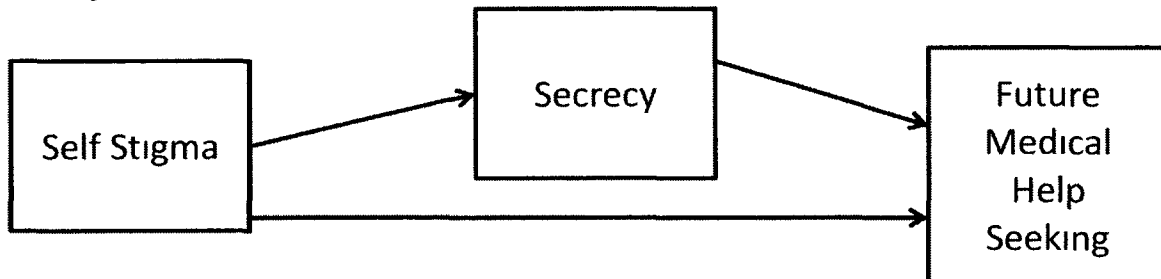


Figure 4 Conceptual Model Predicting Medical Help-Seeking from Self-Stigma and Secrecy



Lastly, I hypothesized that perceived public stigma and self stigma would predict psychological adjustment, and that this relationship would also be mediated through secrecy (see Figure 5 and Figure 6)

Figure 5 Conceptual Model Predicting Psychological Adjustment from Public Stigma and Secrecy

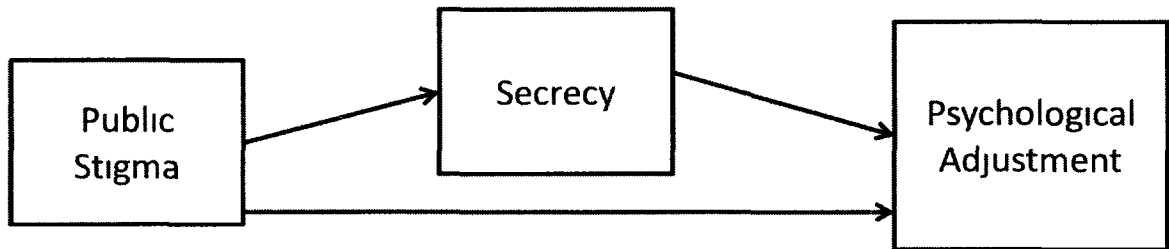
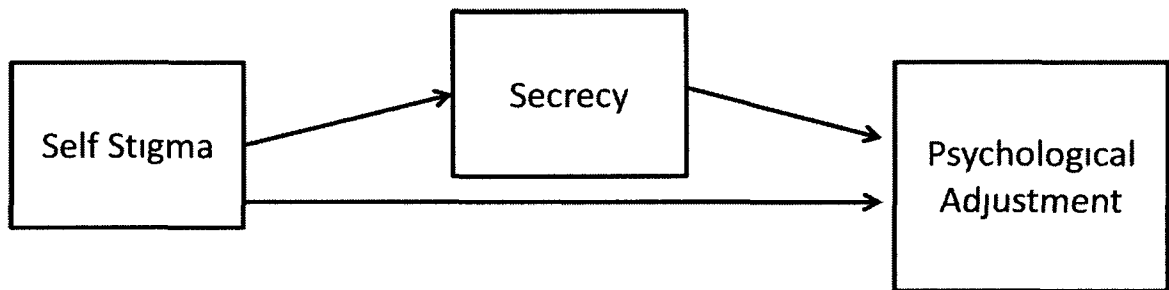


Figure 6 Conceptual Model Predicting Psychological Adjustment from Self Stigma and Secrecy



CHAPTER II

METHOD

Participants

Participants were recruited through various national and international organizations and social networks featuring online forums and discussion boards for self-harm. Message board visitors and members were given an invitation to participate in a study about help-seeking and self-injury by posting a web link to the survey. The invitation solicited individuals to share their experience with self-injury, and all participants volunteered to be part of the study. On websites requiring approval, moderator approval was obtained before the link was posted. No identifying information was collected, and all APA ethical guidelines (APA, 2002) were followed.

Procedure

Upon accessing the survey, participants were given informed consent information, and they clicked “next” to indicate that they have read the consent form, were acknowledging the requirement of being over 18, and were agreeing to participate. Subsequently, they were then presented with a battery of surveys that required approximately 20 minutes to complete.

Measures

Demographics Questionnaire. Participants responded to a demographic questionnaire with information about their age, gender, birth date, sexual orientation,

country of residence, psychiatric diagnosis, and history of related issues (such as gambling and eating disorders) Please refer to Appendix A for items

Self-Harm History. The Deliberate Self-Harm Inventory (DSHI, Gratz, 2001) was used to assess self-harm behaviors This is a 17-item self-report measure assessing acts of deliberate self-harm, with questions pertaining to the type of self-harm, frequency, and severity (see Appendix B) The scale has been found to have adequate test-retest reliability for a range of 2-4 weeks and high internal consistency ($\alpha = .82$) Adequate convergent validity was established by correlating DSHI scores to scores on the Borderline Personality Organization Scale, and adequate construct validity was established using correlations between a dichotomized scoring of the first question on the DSHI (whether a person has ever engaged in deliberate self-harm) and other dichotomous self-harm measures (Gratz, 2001) Participants responded to questions inquiring specifically about various forms non suicidal self-injury in the following format 1) “Have you ever intentionally (i.e., on purpose) [specific behavior] without intending to kill yourself?” 2) “If yes, how old were you when you first did this?” 3) “How many times have you done this?” 4) “When was the last time you did this?” 5) “How many years have you been doing this? (If you are no longer doing this, how many years did you do this before you stopped?)” 6) “Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment?” This format was used to assess several NSSI behaviors cutting on wrists, arms, or other areas of the body, burning with a cigarette, burning with a lighter or match, carving words into the skin, carving pictures, designs or other marks into the skin, severely scratching to the extent that scarring or bleeding occurred, biting to the extent that skin is broken, rubbing sandpaper on the

body, dripping acid onto the skin, using bleach, comet, or oven cleaner to scrub skin, sticking sharp objects into the skin, rubbing broken glass into skin, breaking bones, head banging to the extent of bruising, punching self to the extent of bruising, and preventing wounds from healing. Lastly, participants were asked if they had engaged in any other NSSI behavior not assessed by the questionnaire, and if they endorsed yes, are asked to describe their NSSI behavior.

Previous help-seeking experience and satisfaction Participants were asked whether they had consulted professionals about their self-harm (yes, no, decline) and reported their satisfaction with their experience (very dissatisfied, dissatisfied, neutral, satisfied, very satisfied) for the following groups: doctor, nurse, psychologist, psychiatrist, counselor, social worker, online support group, phone-based crisis line. Help-seeking for NSSI was examined in two different categories: seeking help for injuries (see Appendix C) and seeking help for NSSI thoughts/urges (See Appendix D). Higher scores would indicate greater satisfaction with the help source.

Future help-seeking: To assess help-seeking, participants completed the General Help-seeking Questionnaire (GHSQ, Deane, Wilson, & Ciarrochi, 2001, Wilson, Dean, & Ciarrochi, 2005). This measure examined behavioral intentions of help-seeking in the future. Reliability for this scale has been established when scored as a single scale including all sources of help ($\alpha = .85$, test re-test reliability over three weeks = .92, Wilson et al., 2005). Additionally, the scale has been used measuring help-seeking for general problems (i.e., a personal or emotional problem) and specific problems (e.g., suicidal thoughts) as well as seeking help from a specific type of provider (Wilson et al., 2005).

Validity has been established by examining correlations between help-seeking intentions and actual help-seeking behavior assessed three weeks later, both for informal sources of help ($r = .48, p < .001$ intimate partners, $r = .42, p < .001$ for non-parent family) and formal sources, such as mental health, $r = .17, p < .05$ (Wilson et al., 2005). Participants were asked to indicate on a 7-point Likert-type scale ranging from “extremely unlikely” to “extremely likely” how likely they are to seek help from the following sources: Partner (e.g., significant boyfriend or girlfriend), friend (not related to you), parent, other relative/family member, mental health professional (e.g., school counselor, psychologist, social worker), phone help line, medical professional (e.g., family doctor, general practitioner, nurse), teacher, someone else not listed above (and indicate who that is). Additionally, participants had the option to select “I would not seek help from anyone.”

For the purposes of the present study, the scale was modified to inquire specifically about help-seeking intentions regarding two NSSI-specific concerns: help-seeking for NSSI injuries and help-seeking for NSSI thoughts/urges. To assess medical help-seeking, participants were asked in the following format: “Below is a list of people who you might seek help or advice from if you were experiencing a problem. Please rate how likely it is that you would seek help from each of these people for an NSSI related injury” (see Appendix E). To assess mental health help-seeking, participants responded to the item “Please rate how likely it is that you would seek help from of these people about urges or thoughts of NSSI.” Higher responses on this scale indicated greater intentions (see Appendix F).

Desire to Stop NSSI. Participants were asked whether they would like to stop engaging in NSSI (always, often, sometimes, rarely, never) Please refer to Appendix G

Stigma and Labeling Theory. Several measures of stigma were modeled after Link and Struening's (1997) assessment to measure public stigma (cultural beliefs about devaluation and discrimination), self stigma, and secrecy as a form of coping with stigmatization

Public Stigma. To assess perceptions of public stigma, a modified version of the Devaluation/Discrimination Scale (Link et al , 1997) questionnaire was used, with items revised to target individuals who engage in NSSI, emulating Link et al (1989) who revised the scale to target mental disorders In past research, when modified to include individuals with dual diagnoses, the measure had adequate internal consistency ($\alpha = .78$, Link & Struening, 1997) Participants will be asked to respond to statements such as "Most believe that former NSSI patients cannot be trusted," or "Most people look down on people who have been hospitalized for NSSI," with response categories of "strongly agree," "agree," "disagree," and "strongly disagree " The most current version of the scale (Link, Struening, Neese-Todd, Asmussen, & Phelan, 2002) was modified to be in reference to "individuals who have engaged NSSI" in place of "mental patient " Public stigma had good internal consistency in the present study ($\alpha = .87$) Please refer to Appendix H for item wording

Self Stigma. To measure self stigma (a person's sense of shame, worry and embarrassment about their stigmatized group membership), an adaptation of the Self Stigma scale (Austin, MacLeod, Dunn, Shen, & Perkins, 2004) was used The original

scale, used to assess self stigma among children with a seizure disorder, has been found to have adequate internal consistency ($\alpha = .81$) Validity for this scale was previously established using a negative correlation between the Self Stigma scale and positive attitudes towards epilepsy and a negative association between self Stigma and self concept For the present study, the scale was adapted to inquire about how an individual feels about their "NSSI" in place of "epilepsy" Participants responded on a 5-point Likert-type scale ranging from 1 "never" to 5 "very often" to 5 statements (e.g., "How often do you feel different from other people our age because you have engage in NSSI" or "How often do you feel embarrassed about engaging in NSSI?") Self stigma had good internal consistency in the present study, ($\alpha = 0.82$) Please refer to Appendix I for item wording

Coping with Stigmatization. Secrecy as a form of coping with stigmatization (Link et al., 1989, Link et al., 2002) was assessed with 9 items that focused on hiding stigmatized status and associated treatment For the present study, the questions were modified such that NSSI will replace the term "mental illness" (e.g., "If you had a close relative who had been treated for NSSI, you would advise him or her not to tell anyone about it" or "You encourage members of your family to keep your history of NSSI a secret") Participants responded to these items using a 4-point Likert-type agreement scale, ranging from 1 "strongly disagree" to 4 "strongly agree" Secrecy had good internal consistency in the present study ($\alpha = 0.83$) Please refer to Appendix H for item wording

Psychological adjustment. To measure psychological adjustment, depression/distress symptomology was assessed using the Centre for Epidemiologic

Studies Depression Scale (CES-D, Radloff, 1977) Designed for use in a general population, this 20-item scale measures levels of depressive symptoms over the past week. It has high internal consistency both among the general population ($\alpha = 0.85$) and in a clinical sample ($\alpha = 0.90$) (Radloff, 1977). Validity has been established given significantly higher scores among the clinical population on the CES-D compared to the general population.

Participants were asked to respond to various statements related to mood and behavior during the past week (e.g., "I was bothered by things that don't usually bother me"). They were asked to select the option most appropriate to their experience in the last week: rarely or none of the time (< 1 day), scored as "0", some or a little of the time (1-2 days), scored as "1", occasionally or a moderate amount of the time (3-4 days), scored as "2", or most or all of the time (5-7 days), scored as "3". Higher scores on this scale indicate greater depressive symptoms, with scores greater than 15 suggesting depressive symptoms (Culp, Clymann, & Culp, 1995, Radloff, 1977). In the present study, the CES-D scale had good internal consistency ($\alpha = .93$). Please refer to Appendix K

CHAPTER III

RESULTS

A total of 663 individuals participated in the study. Data for 46 individuals under the age of 18 and for 3 individuals who did not endorse any forms of self-harm were removed. Further, as the participants were predominantly female (representing 93.8% of the sample), results from 29 individuals who identified as male, 7 who identified as transgender, and 2 that did not state their gender were also excluded. Results therefore reflect the participation of 576 women.

Participants ranged in age from 18 to 59 years old, $M = 24.73$, $Med = 22.00$, $Mode = 18$, $SD = 7.67$. Participants reported their sexual orientation as either exclusively heterosexual (44.4%, $n = 256$) or predominantly heterosexual (24.5%, $n = 141$), and otherwise identified themselves as exclusively gay/lesbian (4.7%, $n = 27$), predominantly gay/lesbian (5.3%, $n = 30$), bisexual (20.2%, $n = 115$) or did not disclose their sexual orientation (1.2%, $n = 7$). Most participants indicated that they currently live in the United States (57.8%, $n = 333$). The vast majority of participants (94.7%) reported completing high school education or above. Results also indicated that the vast majority of participants would like to stop engaging in NSSI at least “sometimes,” representing 87.5% of the sample. Please refer to Table 1 for complete demographic information.

Table 1
Demographic Characteristics of Participants (N = 576)

| Characteristic | Percentage | <i>n</i> |
|--|------------|----------|
| Co-morbidity | | |
| History of Depression | 84.4% | 486 |
| History of Bipolar Disorder | 21.0% | 121 |
| History of Borderline Personality Disorder | 25.9% | 149 |
| History of Schizophrenia | 1.2% | 7 |
| History of Obsessive-Compulsive Disorder | 24.7% | 142 |
| History of Dissociative Identity Disorder | 7.6% | 44 |
| History of Anorexia | 33.7% | 194 |
| History of Bulimia | 28.8% | 166 |
| History of overdosing | 34.5% | 199 |
| History of Alcoholism | 16.5% | 95 |
| History of Drug Addiction | 12.5% | 72 |
| History of Stealing | 16.7% | 96 |
| History of Gambling | 1.9% | 11 |
| History of Sexually Transmitted Infections | 3.7% | 22 |
| History of Suicide Attempt | 52.8% | 304 |
| History of Other Factors (e.g., other diagnoses) | 71.0% | 409 |
| Education | | |
| Highest Education Some High School | 4.7% | 27 |
| Highest Education Completed High School | 19.4% | 112 |
| Highest Education Some College | 40.8% | 235 |
| Highest Education Completed College/BA | 21.4% | 123 |
| Highest Education Some Graduate School | 5.6% | 32 |
| Highest Education Completed Graduate School | 7.5% | 43 |
| Highest Education Not reported | 0.7% | 4 |
| Country of Residence | | |
| Country of Residence USA | 57.8% | 333 |
| Country of Residence Other | 42.2% | 243 |
| Sexual Orientation | | |
| Sexual Orientation Exclusively Heterosexual | 44.4% | 256 |
| Sexual Orientation Predom Heterosexual | 24.5% | 141 |
| Sexual Orientation Exclusively Gay/Lesbian | 4.7% | 27 |
| Sexual Orientation Predom Gay/Lesbian | 5.2% | 30 |
| Sexual Orientation Bisexual | 20.0% | 115 |
| Sexual Orientation Unreported | 1.2% | 7 |

Boxplots were used to assess univariate outliers in public stigma, self stigma, secrecy, and psychological functioning, no extreme outliers were found. Public stigma was computed by averaging scores on the public stigma scales, and the composite score was approximately $M = 3.33$, $SD = 0.498$. This is above the midpoint of 2.5, indicating that on average, participants of this study believed that individuals who engage in NSSI will be devalued and discriminated against. Self stigma was also computed by averaging scores on the self stigma scale, and the composite score was, $M = 3.83$, $SD = 0.803$, suggesting a ceiling effect. Secrecy similarly computed by averaging scores on the secrecy scale, and the composite score was approximately normally distributed, $M = 2.76$, $SD = 0.53$. The composite score for the CESD was created using a total score, therefore, participants who either did not miss any questions on the CESD ($n = 544$) or only missed one question ($n = 23$) were used. For those who missed one question, mean substitution was selected to replace the missing value. Scores for the CESD (psychological functioning) were slightly negatively skewed, with mean scores of $M = 38.20$, $SD = 12.919$. This indicates that the average score was above the cut off score of 16 used as an indication of depression among community samples (Radloff, 1977). This suggests that the average participant experienced a great deal of psychological distress in the last week. See Table 2 for descriptive statistics.

Paired sample t-tests were used to test the first hypothesis that individuals who have sought help for NSSI will report lower satisfaction with medical staff compared to mental health staff. Refer to Table 3 for means. A subsample of individuals who have sought help from both mental health and medical professionals for NSSI injuries was first selected. Individuals reported greater satisfaction with mental help professionals than

medical doctors or general practitioners, $t(153) = 2.63$, $d = -0.123$, $p < .001$, for seeking help for NSSI related injuries. A second subset was examined using individuals who have sought help from both medical and mental health providers for NSSI thoughts and urges. Individuals reported greater satisfaction with mental health professionals than medical doctors or general practitioners, $t(120) = 2.436$, $d = 0.235$, $p < .05$, when seeking help for NSSI related thoughts and urges. Therefore, individuals report greater satisfaction with mental health staff for help-seeking experiences as compared to medical staff.

Table 2

Descriptive Statistics- Mean, Standard Deviation, Range, and Standard Error for Age, Symptoms of Depression, and Stigma Variables

| Variable | Mean | Median | Mode | SD | Min | Max | SE |
|---------------------|-------|--------|-------|------|------|-------|----|
| Age 32 | 24.73 | 22.00 | 18 | 7.67 | 18 | 59 | |
| Public Stigma 02 | 3.33 | 3.36 | 3.55 | .50 | 1.64 | 4.45 | |
| Self Stigma 03 | 3.83 | 4.00 | 5.00 | .80 | 1.00 | 5.00 | |
| Secrecy 02 | 2.76 | 2.78 | 2.90 | .53 | 1.00 | 4.00 | |
| CES-D Score 55 | 38.20 | 39.0 | 32.00 | .50 | 4.00 | 64.00 | |

Table 3
Group Differences in Treatment Satisfaction Between Experiences with Medical and Mental Health Providers

| Problem Type | Medical Professional | | Mental Health Professional | | <i>df</i> | <i>t</i> | <i>p</i> | <i>d</i> |
|---------------|----------------------|-----------|----------------------------|-----------|-----------|----------|----------|----------|
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | | | |
| NSSI Injuries | 2.79 | 1.27 | 3.07 | 1.25 | 152 | 2.63 | .009 | .223 |
| NSSI Urges | 2.78 | 1.16 | 3.07 | 1.31 | 119 | 2.44 | .016 | .235 |

The second hypothesis is that satisfaction with previous help-seeking experiences will be positively associated with help-seeking intentions among individuals who have sought professional help in the past. To test this hypothesis, correlations between satisfaction with previous help-seeking experiences and future intentions to seek help for NSSI thoughts/urges and NSSI injuries were conducted. See Table 4 for the results. Among those who have sought help with mental health professionals for NSSI injuries, a positive correlation coefficient between previous mental health treatment satisfaction and future help-seeking intentions with mental health professionals was found, $r(339) = .556$, $p < .01$. Among those who have sought help for NSSI injuries with medical professionals, a positive correlation between previous help-seeking satisfaction and future intentions to seek help from medical staff for NSSI injuries, $r(181) = .662$, $p < .01$.

Among individuals who have previously sought help for *NSSI thoughts and urges* with medical doctors, there was a positive correlation between previous help-seeking satisfaction and future intentions to seek help from medical staff, $r(126) = .644$, $p < .01$. Among individuals who have previously sought help for *NSSI thoughts and urges* from mental health professionals, there was a positive correlation between previous help-seeking satisfaction and future help-seeking intentions from mental health staff, $r(362) = .623$, $p < .01$. These results indicate that regardless of the type of problem (NSSI injuries or NSSI thoughts/urges) and the type of help source (medical professionals or mental health staff), satisfaction with previous help-seeking experiences is positively associated with individuals rating the likelihood that they will return to get help.

To test the third hypothesis that individuals who endorse stigma will also endorse coping using secrecy, two correlations were assessed. A positive correlation coefficient

was found between public stigma and secrecy, $r(545) = .414, p < .01$, supporting the hypothesis that perceived public stigma is associated with secrecy. Additionally, a positive correlation between self stigma and secrecy was found, $r(536) = .421, p < .01$, support the hypothesis that self stigma is also associated with secrecy. A correlation between public and self stigma also indicated a positive correlation, $r(533) = .54, p < .01$. Refer to Table 5 for correlations.

Table 4
Intercorrelations Among Satisfaction with Past Help-seeking and Likelihood of Future Help-seeking

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--|-----|-----|-----|-----|----|----|----|----|
| 1 Satisfaction with Seeking Help for NSSI Injuries | 1 0 | 66 | -- | -- | -- | -- | -- | -- |
| 2 Likelihood of Seeking Help for NSSI Injuries | 56 | 1 0 | -- | -- | -- | -- | -- | -- |
| 3 Satisfaction with Seeking Help for NSSI Thoughts/Urges | -- | -- | 1 0 | 62 | -- | -- | -- | -- |
| 4 Likelihood of Seeking Help for NSSI Thoughts/Urges | -- | -- | 64 | 1 0 | -- | -- | -- | -- |

Note Lower diagonal coefficients correspond to mental health professionals, and upper diagonal coefficients correspond to medical staff. All coefficients are significant at $p < .01$.

Table 5
Intercorrelations for Public Stigma, Self Stigma, Secrecy, and Depression

| Measure | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------|------|------|------|--------|------|----|
| 1 Public Stigma | -- | | | | | |
| 2 Self Stigma | 54** | -- | | | | |
| 3 Secrecy | 41** | 42** | -- | | | |
| 4 Depression | 31** | 45** | 12** | -- | | |
| 5 Age | 17* | 00 | 07 | 02 | -- | |
| 6 Wanting to Stop | - 02 | 02 | 01 | - 11** | 13** | -- |

Note All coefficients labeled with ** are significant at $p < .01$, all coefficients labeled with * are significant at $p < .05$.

To test the fourth hypothesis that individuals who have never sought any form of treatment will score lower on the public and self stigma than individuals who have sought treatment in the past, two independent sample t-tests were conducted examining differences in public and self stigma. Please refer to results in Table 6. When examining those who have sought help for *NSSI injuries*, individuals who have never sought help did not report significantly lower public stigma ($M = 3.31, SD = .48$), than individuals who have sought help in the past ($M = 3.33, SD = .50$), $t(520) = .483, ns$ ($p = .63$). Nor did individuals who have never sought treatment for *NSSI injuries* report significantly lower self stigma ($M = 3.75, SD = .77$) than individuals who have sought help in the past ($M = 3.38, SD = .81$), $t(538) = 1.71, ns$ ($p = .08$). Additionally, secrecy was not significantly higher among individuals who did not seek help for *NSSI injuries*, ($M = 2.80, SD = .48$), compared to individuals who have sought help ($M = 2.74, SD = .55$), $t(518) = -1.28, ns$.

Table 6
Group Differences in Public and Self Stigma Between Those Who Have and Have Not Sought Help

| Stigma Variable | Have Sought Help | | Have Not Sought Help | | <i>df</i> | <i>t</i> | <i>p</i> | <i>d</i> | |
|-------------------|------------------|-----------|----------------------|-----------|-----------|----------|----------|----------|--|
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | | | | |
| Cohen's | | | | | | | | | |
| For NSSI Injuries | | | | | | | | | |
| Public Stigma | 3.34 | .50 | 3.31 | .48 | 520 | 48 | .63 | .050 | |
| Self Stigma | 3.39 | .81 | 3.76 | .77 | 538 | 1.71 | .09 | .155 | |
| Secrecy | 2.74 | .55 | 2.80 | .48 | 518 | -1.282 | .20 | -.012 | |
| For NSSI Urges | | | | | | | | | |
| Public Stigma | 3.32 | .50 | 3.37 | .48 | 522 | -.83 | .40 | -.096 | |
| Self Stigma | 3.82 | .80 | 3.90 | .80 | 541 | -.93 | .35 | -.104 | |
| Secrecy | 2.73 | .52 | 2.9 | .56 | 523 | -2.85 | .00 | -.320 | |

Individuals who have not sought treatment for NSSI thoughts and urges did not report significantly lower public stigma ($M = 3.37, SD = .48$) than individuals who have sought help in the past ($M = 3.32, SD = .50$), $t(522) = -.83, ns$ ($p = .40$). Likewise, individuals who have never sought help for NSSI thoughts and urges ($M = 3.90, SD = .80$) did not report significantly lower self stigma than individuals who have sought help in the past ($M = 3.82, SD = .80$), $t(541) = -.93, d = -.0104, ns$ ($p = .35$). However, individuals who have never sought help for NSSI thoughts and urges reported significantly higher secrecy ($M = 2.9, SD = .55$) than individuals who have sought help in the past ($M = 2.73, SD = .51$), $t(523) = -2.85, p = .005$. These results indicate that individuals who have previously sought help do not have greater public or self stigma than those who have never sought help in the past, regardless of whether the help-seeking experience was for NSSI injuries or NSSI thoughts/urges. However, individuals who did not seek help for NSSI thoughts and urges reported significantly higher secrecy.

To test the fifth hypothesis that stigma will predict help-seeking, and that this relationship will be mediated through secrecy (concealment), I conducted mediation analysis using regression. Public Stigma did not significantly predict *mental health help-seeking*, $\beta = -.011, t(441) = -.224, ns$ (see Figure 7). Likewise, public stigma did not significantly predict *medical help-seeking*, $\beta = -.069, t(448) = -1.473, ns$ (see Figure 8). Similarly, self stigma did not predict *mental health help-seeking*, $\beta = -.068, t(458) = -1.467, ns$ (see Figure 9) and did not predict *medical help-seeking*, $\beta = -.056, t(472) = -1.210, ns$ (See Figure 10). Because no total effect was established between public stigma and Help-seeking, as well as self stigma and Help-seeking, no further mediation analyses were conducted. See Table 7 for the results.

Figure 7 Step 1 of Mediation Analysis Regression Testing Total Effect of Public Stigma on Future Mental Health Help-seeking

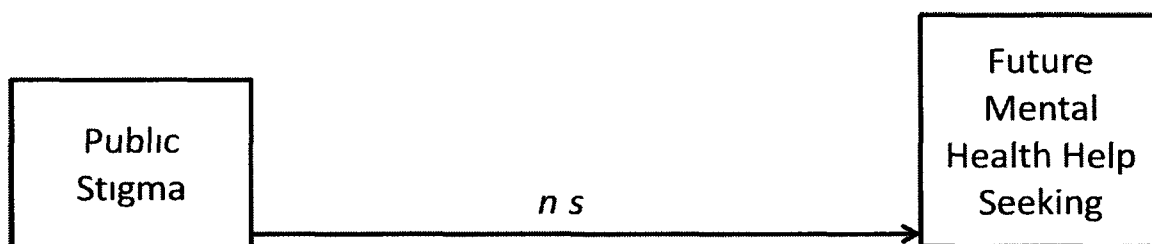


Figure 8 Step 1 of Mediation Analysis Regression testing total effect of Public Stigma on Future Medical Help-seeking

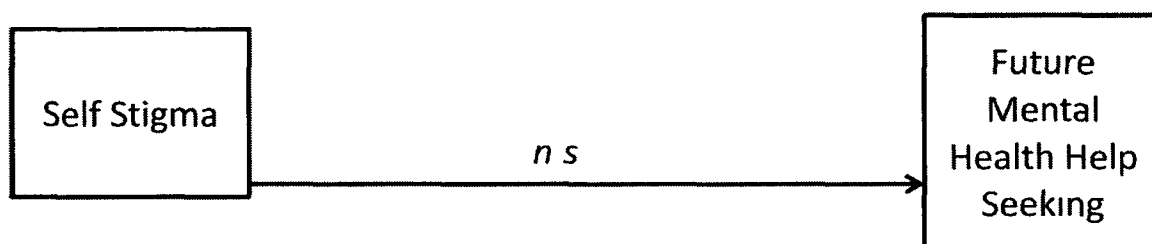


Figure 9 Step 1 of Mediation Analysis Regression Testing Total Effect of Self Stigma on Future Mental Health Help-seeking

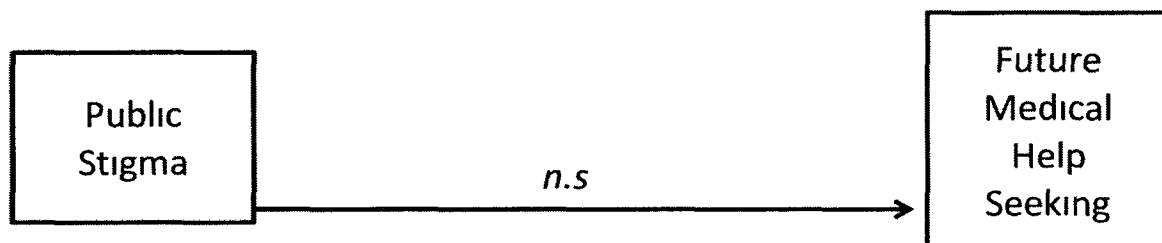


Figure 10 Step 1 of Mediation Analysis Regression Testing Total Effect of Self Stigma on Future Medical Help Seeking

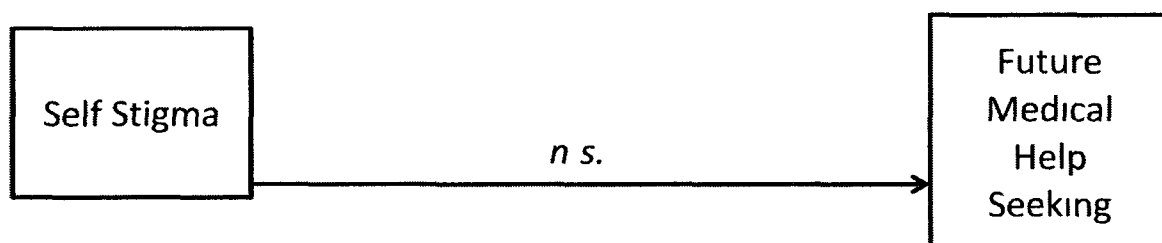


Table 7

Regression Analysis Summary for Stigma Predicting Help-seeking

| Variable | <i>B</i> | β | <i>t</i> | <i>p</i> |
|-----------------------------------|----------|---------|----------|----------|
| Mental Health Help-seeking | | | | |
| Public Stigma | -0.03 | -0.01 | -0.22 | .82 |
| Self Stigma | -0.12 | -.07 | -1.47 | .14 |
| Medical Help-seeking | | | | |
| Public Stigma | -0.15 | -.07 | -1.47 | .14 |
| Self Stigma | -.07 | -.06 | -1.21 | .22 |

To test the sixth hypothesis, that perceived public stigma and self stigma will predict psychological functioning and that this relationship will be mediated through secrecy (concealment), I conducted mediation analysis using regression analysis. See Table 8 and Table 9 for the results. Public stigma significantly predicted psychological functioning, $\beta = .334$, $t(434) = 7.377$, $p < .001$, and explained a significant proportion of variance in psychological functioning, $R^2 = .112$ (see Figure 11). Further, public stigma predicted secrecy, $\beta = .462$, $t(434) = 10.825$, $p < .001$, $R^2 = .213$ (see Figure 12). Subsequently, I conducted an additional regression analysis to test whether the relationship between public stigma and psychological functioning is mediated by secrecy (see Figure 13). Results indicate that public stigma significantly predicted psychological functioning, $\beta = .291$, $t(432) = 5.71$, $p < .001$. However, secrecy did not significantly predict psychological functioning, $\beta = .093$, $t(432) = 1.832$, $n.s.$ ($p = .068$), and mediation was not possible.

Figure 11 Step 1 of Mediation Analysis Regression testing total effect of Public Stigma on Psychological Adjustment

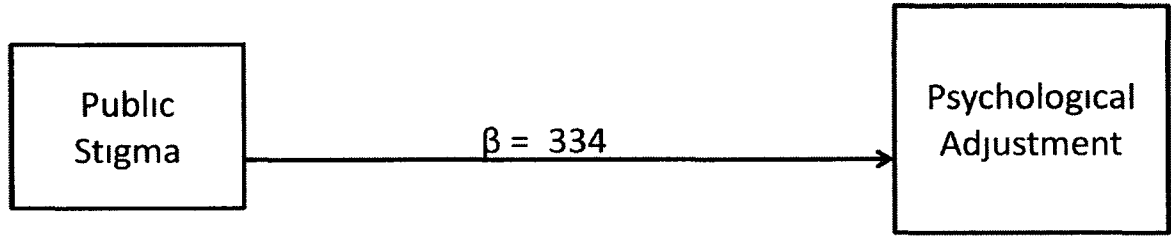


Figure 12 Step 2 of Mediation Analysis Regression testing effect of Public Stigma on Secrecy

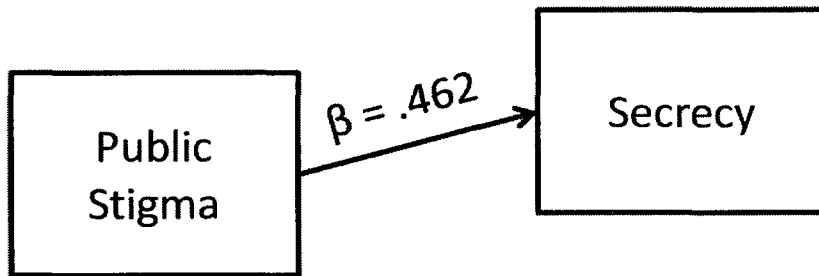


Figure 13 Step 3 of Mediation Analysis Regression testing effect Public Stigma on Psychological Adjustment including Secrecy as a mediator

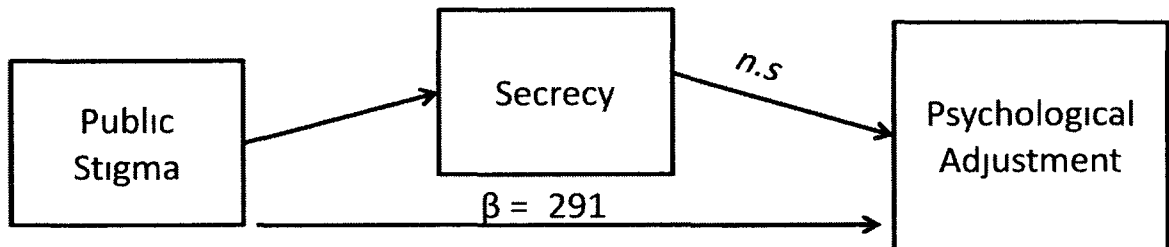


Table 8

Regression Analysis Summary for Public Stigma Predicting Depression and Secrecy, and Predicting Depression with Public Stigma and Secrecy in Model

| Variable | <i>B</i> | β | <i>t</i> | <i>p</i> |
|--|----------|---------|----------|----------|
| Predicting Depression | | | | |
| Public Stigma | 9.55 | .33 | 7.37 | < .001 |
| Predicting Secrecy | | | | |
| Public Stigma | .47 | .46 | 10.82 | < .001 |
| Predicting Depression with Public Stigma and Secrecy in Model | | | | |
| Public Stigma | 8.31 | .29 | 5.71 | < .001 |
| Secrecy | 2.61 | .09 | 1.83 | .07 |

Table 9

Regression Analysis Summary for Self Stigma Predicting Depression and Secrecy, and Predicting Depression with Self Stigma and Secrecy in Model

| Variable | <i>B</i> | β | <i>t</i> | <i>p</i> |
|--|----------|---------|----------|----------|
| Predicting Depression | | | | |
| Self Stigma | 7.60 | .48 | 11.22 | < .001 |
| Predicting Secrecy | | | | |
| Self Stigma | .25 | .43 | 9.99 | < .001 |
| Predicting Depression with Self Stigma in Model | | | | |
| Self Stigma | 7.55 | .48 | 9.99 | < .001 |
| Secrecy | .24 | .00 | 1.80 | .857 |

Self stigma significantly predicted psychological functioning, $\beta = .479$, $t(422) = 11.216$, $p < .001$ (see Figure 14) and secrecy, $\beta = .438$, $t(422) = 9.999$, $p < .001$ (see Figure 15). However, when testing whether self stigma and secrecy predict psychological functioning, secrecy was not a significant predictor, $\beta = .009$, $t(421) = 1.80$, ns ($p = .857$), whereas self stigma was a significant predictor of psychological functioning, $\beta = .475$, $t(421) = 9.994$, $p < .001$ (see Figure 16). As secrecy was not a significant predictor, mediation was not possible. The model as a whole explained a significant amount of variance in psychological functioning, $R^2 = .230$, $F(2,421) = 62.758$, $p < .001$. Because secrecy was not a significant predictor of psychological functioning in this model, further mediation analyses were not conducted.

Figure 14 Step 1 of Mediation Analysis Regression testing total effect of Self Stigma on Psychological Adjustment

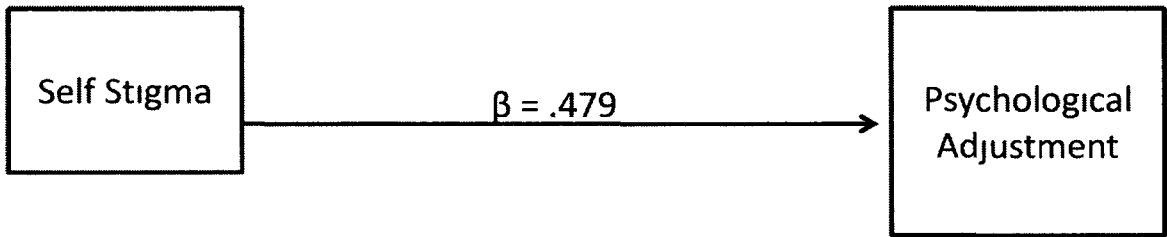


Figure 15 Step 2 of Mediation Analysis Regression testing effect of Self Stigma on Secrecy

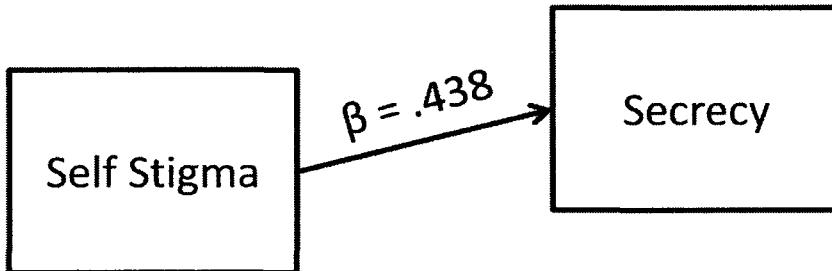
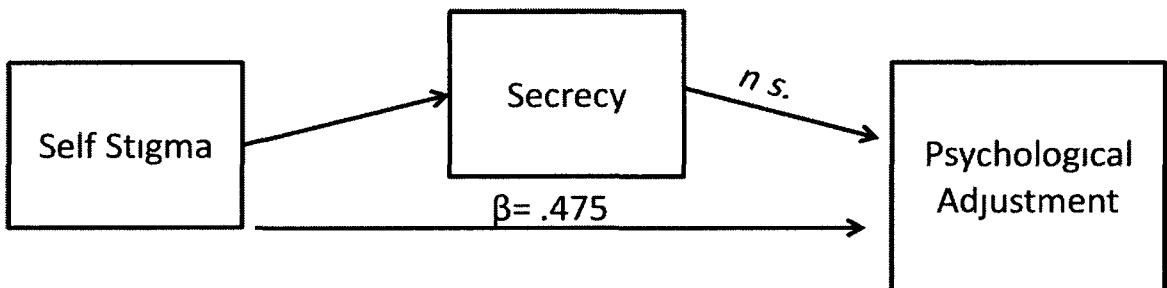


Figure 16 Step 3 of Mediation Analysis Regression testing effect Self Stigma on Psychological Adjustment including Secrecy as a mediator



CHAPTER IV

DISCUSSION AND CONCLUSIONS

The purpose of the present study was to examine the pervasiveness and consequences of stigma among individuals who engage in non-suicidal self-injury as well as to examine previous help-seeking experiences and future help-seeking intentions among individuals who are users of online self-harm forums. The application of Modified Labeling Theory to individuals who engage in NSSI is novel and has implications for addressing help-seeking behaviors among a high risk population.

One unique contribution of this study was separately examining two distinct problems within NSSI: *NSSI injuries* versus *NSSI thoughts and urges*. Therefore, help-seeking was examined from the perspective of seeking help from two different sources, medical professionals and mental health professionals. As expected, lower satisfaction with *medical staff* (doctors, general practitioners), compared to *mental health staff*, was found across help-seeking experiences for both *NSSI thoughts/urges* and *NSSI injuries*. This finding is consistent with other studies that have examined help-seeking for NSSI (e.g., Warm et al., 2002). The unfortunate implication of this finding is that individuals reported greater satisfaction in speaking with mental health professionals about injuries than medical sources of help, even though medical providers may be more appropriate in addressing physical ailments and preventing potential infections and scarring (Hoffman & Kress, 2008; Tanner, 2007). Also, more individuals in this study had experience with

seeking help for *NSSI thoughts/urges* than seeking medical attention for their *NSSI injuries*, corroborating previous findings (Whitlock et al , 2006)

As hypothesized, past help-seeking experiences were associated with higher likelihood ratings for future help-seeking. This was the case for seeking help for *NSSI injuries* from both *mental health* and *medical* professionals as well as for seeking help for *NSSI thoughts/urges* from both *mental health* and *medical* professionals. This indicates that past help-seeking experiences across both sources of help and across both types of *NSSI* concerns are associated with a greater likelihood of returning to seek help from that source and for that problem.

It is important to note that among individuals who have sought help from both medical staff and mental health staff for *NSSI injuries*, the average satisfaction for mental health staff corresponded to “neutral” and the average satisfaction for medical staff corresponded to a range between “dissatisfied” and “neutral.” Satisfaction ratings for help with *NSSI thoughts/urges* were virtually the same for mental health and medical staff. The implication of this finding is that past help-seeking experiences for both concerns from either health or mental health professionals are not very satisfying. Perhaps this general dissatisfaction explains why the majority of the sample (78%) indicated that they are likely not to seek help from anyone for *NSSI injuries*, and 70.7% indicated that they are likely not to seek help from anyone for *NSSI thoughts/urges*. It therefore does not seem surprising that other studies find rather low endorsement of professional help-seeking among individuals who engage in *NSSI* (Gollust et al , 2008, Nada-Raja et al , 2003). This highlights the need for all professionals assisting those with

self-injury to reconsider how to improve the services they render (Taylor, et al , 2009), including providing effective treatment

In order to apply the Modified Labeling Theory (Link et al , 1989) to examine the effects of stigma among individuals who engage in NSSI, each component was examined on its own. Past research indicates that individuals who have a history of NSSI feel stigmatized by others (e.g., as in the case of medical treatment, Duperouzel & Fish, 2008), feel ashamed or have other negative feelings about their behavior (Briere & Gil, 1998, Laye-Gindhu, & Schonert-Reichl, 2005), and often do not discuss their NSSI history with anyone (Whitlock et al , 2006). Results from this study find evidence that individuals who engage in self-harm endorse higher public and self stigma as well as increased secrecy. The public stigma responses indicate that, on average, individuals in this study believe that those who engage in NSSI will be devalued and discriminated against. The assessment of secrecy as a coping mechanism indicates that, on average, participants in this study endorsed actively trying to hide and discourage others from sharing their history of NSSI.

These results indicate that public stigma, self stigma, and secrecy are relevant to individuals who engage in NSSI. Therefore, experiences of stigma and secrecy among this population increase the negative repercussions faced by individuals who self-harm, which may further complicate recovery. This is evident from past research indicating that stigma and secrecy are associated with negative outcomes including depression, psychological distress, lowered self esteem, lower self efficacy, and decline in functioning (Corrigan & Wassel, 2008, Corrigan & Watson, 2002, Link et al , 1989, Link et al , 1997, Moses 2009 a, 2009b). Additionally, it is important to note that secrecy

yields less discussion of history of self-harm and a subsequent decline in help-seeking behavior. This is particularly alarming given the fact that history of suicide attempts and ideation is common among individuals who self-harm (Klonsky & Olino, 2008), further confirmed by the 52.8% endorsement of past suicide attempts in the present study.

As hypothesized, based on previous stigma research, (Link et al., 1989, Link & Phelan, 2001, Moses 2009a) a positive association exists among both stigma variables (public stigma and self stigma) and secrecy, indicating that individuals who endorse stigma do in fact also endorse coping with stigma using secrecy. Additionally, public and self stigma were also positively correlated, suggesting that the process of perceiving how the public may devalue and discriminate against individuals with a history of NSSI is also associated with feeling embarrassed or ashamed about NSSI. The magnitude of the correlation suggests a fairly strong relationship between the two stigma constructs, but also suggests that there is enough unshared variance that the two are distinct aspects of stigma in a NSSI population.

According to Modified Labeling Theory, the way in which a person begins to attribute society's perceptions of a stigmatized group as relevant to themselves is through a "labeling process," which in the case of illness occurs through treatment contact (Link et al., 1989). Having a treatment contact triggers the process by which "a seemingly innocuous array of beliefs become applicable to oneself" and provides an "official label" (Link et al., 1989, p. 403). The individual's association with a given label results in negative consequences and methods of coping associated with stigma (Moses 2009b). As a result of recognizing their stigmatized identity, a person may then attempt to cope with stigma through a variety of different mechanisms, including secrecy, where a person will

hide their history of the illness and treatment history from others as an attempt to avoid further rejection. I therefore examined whether individuals who have never sought any forms of treatment would have a different experience with stigma than those who have sought treatment in the past.

Contradictory to my fourth hypothesis, no differences in public or self stigma were found between individuals who have sought treatment in the past, whether for *NSSI thoughts/urges* or *NSSI injuries*. These results indicate that having a treatment contact is not necessary for individuals who have a history of NSSI to perceive negative public attitudes towards NSSI nor is treatment contact a prerequisite for internalizing negative beliefs and experiencing subsequent shame about NSSI. This is in line with the findings of Manos, Rusch, Kanter, & Clifford (2009), indicating no difference in stigma endorsement among individuals with and without a treatment history. Therefore, the experience of public and self stigma does not depend on having previous contact with a treatment provider. Individuals who engage in self-harm experience perceived devaluation/discrimination, as well as embarrassment and shame about their self-harm, irrespective of treatment history.

As previous researchers have not examined differences in secrecy among those who have sought help versus those who have not, I conducted post hoc analyses on secrecy. Specifically, I hypothesized that individuals who had never sought help would endorse higher levels of secrecy, given that secrecy represents the desire and active attempt of concealing NSSI history. Results suggest that in the case of seeking help for *NSSI thoughts/urges*, secrecy varies based on treatment contact, such that those who have never sought help for *NSSI thoughts/urges* reported higher levels of secrecy ($M =$

2.91) than individuals who have sought treatment in the past ($M = 2.73$), $t(523) = -2.85$, $p = .005$. However, there were no significant differences in secrecy in help-seeking for *NSSI injuries*. This suggests that secrecy may lead to less help-seeking behavior for *NSSI thoughts/urges*, but may not be salient in differentiating *NSSI injury* help-seeking behavior.

As no group differences were found in terms of public or self stigma constructs in reference to seeking help for *NSSI injuries*, seeking help for injuries may not be stigma-dependent. As previously reviewed, one major concern with regard to NSSI is that individuals may not seek any medical attention (Evans et al., 2005; Whitlock et al., 2006). Most of the time individuals do not seek any help for NSSI injuries (Whitlock et al., 2006), yet may inflict injuries that are severe enough to require medical attention or even hospitalization (Gratz, 2001). I therefore examined whether experiencing severe injuries impacted likelihood of future help-seeking. I found that those who have ever hurt themselves more severely than expected (compared to those who have not) were not any more likely to seek help for *NSSI injuries* from any help source and were only more likely to talk to a significant other/partner regarding *NSSI urges*. Therefore, past experiences with unexpected severe injuries do not prompt people to seek help for the injuries, and severe injuries may only elevate the likelihood of sharing with an intimate partner about *NSSI urges*.

The Relationship Between Stigma and Help-seeking

I hypothesized that there would be a relationship between stigma and help-seeking and that this relationship would be mediated by secrecy. However, contrary to

past studies (Barney, Griffins, Jorm, & Christensen, 2005, Belloch et al , 2009, Conner et al , 2009, Givens et al , 2007, Vogel, Wade, & Haake, 2006) and theoretical discussions (e g Corrigan, 2004) that describe the relationship between stigma and help-seeking, this relationship as not supported by my findings. Neither public nor self stigma were associated with professional help-seeking across both mental health help-seeking and medical help-seeking for NSSI.

An examination of the correlations between public stigma and help-seeking indicated that public stigma is only negatively associated with informal sources of help for both *NSSI injuries* and *NSSI urges*, such that individuals with higher public stigma were less likely to seek help from their partner, friends, other family members, or a teacher (refer to Table 10). In terms of seeking help for *NSSI urges*, public stigma was also negatively associated with seeking help from online discussion boards (see Table 11). Thus among individuals who engage in NSSI, public stigma is not at all associated with seeking professional help. These findings are supported by previous research that has not established a relationship between public stigma and help-seeking, such as seeking treatment at a hospital clinic, attending a treatment session after intake, completing an inpatient treatment program, or seeking therapy/counseling (Alvidrez, Snowden, & Patel, 2010, Eisenberg, Downs, Golberstein, & Zivin, 2009, Rusch et al , 2008).

Table 10

Intercorrelations of Likelihood of Future Help-seeking for NSSI Injuries and Public Stigma

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|--|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----|
| Item 1 Public Stigma | 1 0 | | | | | | | | | | |
| Item 2 Seeking Help for Injury with Partner | - .14 | 1 0 | | | | | | | | | |
| Item 3 Seeking Help for Injury with Friend | - .11 | .35 | 1 0 | | | | | | | | |
| Item 4 Seeking Help for Injury with Parent | - .07 | .24 | .21 | 1 0 | | | | | | | |
| Item 5 Seeking Help for Injury with Other Relative | -.10 | .17 | .24 | .45 | 1 0 | | | | | | |
| Item 6 Seeking Help for Injury with Mental Health Prof | - .02 | .12 | .22 | .15 | .14 | 1 0 | | | | | |
| Item 7 Seeking Help for Injury with Phone Help Line | - .03 | .03 | .16 | .05 | .09 | .27 | 1 0 | | | | |
| Item 8 Seeking Help for Injury with Doctor/GP | - .07 | .00 | .10 | .04 | .14 | .40 | .20 | 1 0 | | | |
| Item 9 Seeking Help for Injury with Online Forum/Chat | - .05 | .16 | .23 | -.05 | .01 | .14 | .15 | .10 | 1 0 | | |
| Item 10 Seeking Help for Injury with Teacher | - .16 | .13 | .22 | .15 | .18 | .20 | .08 | .15 | .19 | 1 0 | |
| Item 11 Not Seeking Help for Injury from Anyone | .08 | -.24 | -.25 | -.14 | -.19 | -.30 | -.13 | -.22 | -.06 | -.16 | 1 0 |

Note All significant coefficients are bolded

Table 11

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----|
| Item 1 Public Stigma | 1 0 | | | | | | | | | | |
| Item 2 Seeking Help for Thoughts with Partner | -.14 | 1 0 | | | | | | | | | |
| Item 3 Seeking Help for Thoughts with Friend | -.12 | .41 | 1 0 | | | | | | | | |
| Item 4 Seeking Help for Thoughts with Parent | -.05 | .19 | .18 | 1 0 | | | | | | | |
| Item 5 Seeking Help for Thoughts with Other Relative | -.10 | .14 | .25 | .47 | 1 0 | | | | | | |
| Item 6 Seeking Help for Thoughts with Mental Health | -.03 | .14 | .26 | .11 | .15 | 1 0 | | | | | |
| Item 7 Seeking Help for Thoughts with Phone Line | -.03 | .11 | .22 | .05 | .11 | .31 | 1 0 | | | | |
| Item 8 Seeking Help for Thoughts with Doctor/GP | -.04 | .07 | .12 | .06 | .12 | .34 | .23 | 1 0 | | | |
| Item 9 Seeking Help for Thoughts with Online Forum | -.09 | .20 | .27 | -.01 | .03 | .19 | .22 | .14 | 1 0 | | |
| Item 10 Seeking Help for Thoughts with Teacher | -.12 | .09 | .27 | .13 | .18 | .18 | .13 | .20 | .13 | 1 0 | |
| Item 11 Not Seeking Help for Thoughts from Anyone | .08 | -.18 | -.18 | -.09 | -.12 | -.18 | -.10 | -.14 | -.01 | -.02 | 1 0 |

Intercorrelations of Likelihood of Future Help-seeking for NSSI Thoughts/Urges and Public Stigma

Note All significant coefficients are bolded

Although other studies have found that self stigma is a predictor of poor outpatient treatment attendance (Tsang, Fung, & Corrigan, 2006) and is negatively associated with positive attitudes toward seeking help (Golberstein et al , 2008), the results of the present study did not find a relationship between self stigma and any help-seeking behaviors across all of the help sources assessed (both informal and formal) Therefore, for this sample, self stigma was completely unrelated to the likelihood of seeking help, neither for *NSSI injuries* nor *NSSI thoughts/urges* Refer to Table 12 for the results on for help-seeking for *NSSI injuries* and Table 13 for the results on help-seeking for *NSSI thoughts/urges*

Table 12
Intercorrelations of Likelihood of Future Help-seeking for NSSI Injuries and Self Stigma

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|--|------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|-----|
| Item 1 Self Stigma | 1 0 | | | | | | | | | | |
| Item 2 Seeking Help for Injury with Partner | - 08 | 1 0 | | | | | | | | | |
| Item 3 Seeking Help for Injury with Friend | - 06 | .35 | 1 0 | | | | | | | | |
| Item 4 Seeking Help for Injury with Parent | - 07 | .24 | .21 | 1 0 | | | | | | | |
| Item 5 Seeking Help for Injury with Other Relative | - 06 | .17 | .24 | .45 | 1 0 | | | | | | |
| Item 6 Seeking Help for Injury with Mental Health Prof | 02 | .12 | .22 | .15 | .14 | 1 0 | | | | | |
| Item 7 Seeking Help for Injury with Phone Help Line | 07 | 03 | .16 | 05 | .09 | .27 | 1 0 | | | | |
| Item 8 Seeking Help for Injury with Doctor/GP | - 04 | 00 | .10 | 04 | .14 | .40 | .20 | 1 0 | | | |
| Item 9 Seeking Help for Injury with Online Forum/Chat | 03 | .16 | .24 | - 05 | 01 | .14 | .15 | .10 | 1 0 | | |
| Item 10 Seeking Help for Injury with Teacher | - 05 | .13 | .22 | .15 | .18 | .20 | 08 | .15 | .19 | 1 0 | |
| Item 11 Not Seeking Help for Injury from Anyone | 04 | - .24 | - .25 | - .14 | - .19 | - .30 | - .13 | - .22 | - 06 | - .16 | 1 0 |

Note All significant coefficients are bolded

Table 13

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|--|------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|------|-----|
| Item 1 Self Stigma | 1 0 | | | | | | | | | | |
| Item 2 Seeking Help for Thoughts with Partner | - 08 | 1 0 | | | | | | | | | |
| Item 3 Seeking Help for Thoughts with Friend | - 08 | .41 | 1 0 | | | | | | | | |
| Item 4 Seeking Help for Thoughts with Parent | - 03 | .19 | .18 | 1 0 | | | | | | | |
| Item 5 Seeking Help for Thoughts with Other Relative | - 05 | .14 | .25 | .47 | 1 0 | | | | | | |
| Item 6 Seeking Help for Thoughts with Mental Health | - 01 | .14 | .26 | .11 | .15 | 1 0 | | | | | |
| Item 7 Seeking Help for Thoughts with Phone Line | - 01 | .11 | .22 | .06 | .11 | .31 | 1 0 | | | | |
| Item 8 Seeking Help for Thoughts with Doctor/GP | 01 | .08 | .12 | .06 | .12 | .34 | .23 | 1 0 | | | |
| Item 9 Seeking Help for Thoughts with Online Forum | - 03 | .20 | .27 | - 01 | .03 | .19 | .22 | .14 | 1 0 | | |
| Item 10 Seeking Help for Thoughts with Teacher | 00 | .09 | .27 | .13 | .18 | .18 | .13 | .13 | .20 | 1 0 | |
| Item 11 Not Seeking Help for Thoughts from Anyone | 08 | -.18 | -.18 | -.09 | -.12 | -.18 | -.11 | -.14 | - 01 | - 02 | 1 0 |

Intercorrelations of Likelihood of Future Help-seeking for NSSI Thoughts/Urges and Self Stigma

Note All significant coefficients are bolded

Studies have found that the way in which a person perceives or internalizes stigma may also differ based on age (Golberstein et al , 2008; Sirey et al , 2001) I therefore conducted post-hoc analyses to examine the role of age as a stigma covariate This study found that age was positively associated only with public stigma However, as public stigma was only negatively associated with informal help sources, differences in public stigma based on age cannot explain the lack of relationship between public stigma and professional helps seeking in this sample Age was not related to self stigma, secrecy, or severity of depression

Age may also play a part in the type of help sought, as younger individuals report they are less likely to seek help from just about any help sources (Barney et al , 2005) In the present study, post hoc analyses showed that age was negatively associated with seeking help for *NSSI injuries* from friends, partner, other family, parent, online discussion boards, and teachers Similarly, age was negatively associated with seeking help for *NSSI urges* from partner, parent, discussion boards, and teachers Age was also positively associated with seeking help for both *NSSI urges* and *NSSI injuries* from mental health professionals, medical professionals, and a phone help line, as well as greater likelihood of seeking help in general for *NSSI injuries* Further, age was positively associated with the desire to stop engaging in self-harm Thus, with age, individuals are less likely to seek help from informal sources and online discussion boards and more likely to seek help from professionals and phone help lines, and are also more likely to want to stop engaging in *NSSI*

Researchers have also shown that suicidal ideation is associated with low help-seeking intentions across all help sources, both professional (including medical and

mental health professionals) and informal sources such as family and friends (Deane et al, 2001) Further, suicidal ideation is related to not seeking any form of help for suicidal or non-suicidal problems among young adults (Deane et al, 2001) One research study determined a negative relationship between intentions to seek mental health help and suicidal ideation, such that even low levels of suicidal ideation were associated with a decline in help-seeking intentions (Dean et al, 2001) I therefore conducted additional analyses on the relationship between past suicide attempt and help-seeking Just over half of the participants indicated that they had previously attempted suicide (52%), but past suicide attempt did not impact informal help-seeking However, results suggest that those with a history of a suicide attempt are more likely to seek formal help for *NSSI injuries* Those with a previous suicide attempt also reported that they are actually more likely to talk about their *NSSI urges* with a mental health doctor and medical doctor, but also endorsed that they are more likely to not seek help from anyone Thus, past history of suicide attempt may be associated with a decline in help-seeking, and past attempt history may be a more relevant predictor of help-seeking behavior than stigma for individuals who engage in *NSSI*

Additional Factors Impacting Help-seeking

Disclosure is often confounded by complex concerns intertwined with secrecy (Corrigan & Matthews, 2003) Concerns about disclosing self-harm may be complicated by other hidden identities, such as sexual orientation, as in the case among Lesbian and Bisexual women who engage in self-injury (Alexander & Clare, 2004) As only 44.4% of the present sample endorsed that they were “exclusively heterosexual,” I decided to examine difference in help-seeking based on sexual minority status Post hoc analyses

revealed that those who did not endorse exclusive or predominate heterosexual orientation were less likely to talk to a medical professional about their *NSSI urges* but were more likely to use online discussion boards for help with both *NSSI urges*, and *NSSI injuries*. Aside from the use of discussion boards, sexual orientation was unrelated to help-seeking across both professional and informal help for *NSSI injuries*. These findings suggest that discussion boards may be an effective avenue to reach sexual minority individuals for help with *NSSI*.

Although studies have also shown the importance of familial attitudes in examining help-seeking (Moses, 2010, Pescosolido, Perry, Martin, McLeod, & Jensen, 2007), attitudes of parents or family members may not be very relevant to individuals who engage in *NSSI*. Previous studies show that individuals who engage in self-harm are unlikely to discuss their self-harm with parents or family members (Evans et al., 2005, Ryan et al., 2008). Similarly, the present study found that 70.9% of participants stated they would be “extremely unlikely” to seek help from their parents, and 74% endorsed “extremely unlikely” with other relatives/family members in seeking help for *NSSI injuries*, 79.3% and 79.5% reported they would be extremely unlikely to talk to their parents and other relatives about *NSSI urges*. Therefore, as family members may not even be aware of an individual’s *NSSI* history, it seems unlikely that family attitudes would impact treatment seeking for this population.

Further help-seeking differences were examined regarding the degree to which individuals would like to or try to stop engaging in self-injury. This study found that an overwhelming amount of participants (87.5%) stated they would like to stop engaging in self-harm at least sometimes. The desire to stop self-harm does not necessarily seem at

odds with the reported low likelihood of seeking professional help, confirming past findings of the preference for informal help-seeking for NSSI (Evans et al , 2005, Fortune, Sinclair, & Hawton, 2008, Nada-Raja et al , 2003, Ryan et al , 2008) In the present study, desire to stop self-harm is positively associated with seeking help for *NSSI injuries* from a friend and significant other/partner only Therefore, wanting to stop self-harm is not associated with greater likelihood of getting injuries addressed by a medical professional Desire to stop was also positively associated with seeking help for *NSSI urges* from a friend, partner, mental health provider, medical provider, and greater likelihood of seeking help in general This indication is that the more a person wants to stop engaging in self-harm, the greater the likelihood that they will actually see help for *NSSI urges* from someone, including a professional, but this is not the case in terms of seeking help for injuries

Role of Secrecy in Help-seeking

Secrecy was hypothesized as a mediator of the relationship between stigma and help-seeking, however, no relationship between stigma and help-seeking was found I hypothesized that secrecy may still have a relationship with help-seeking For example, Nock and Banaji (2007) describe that individuals who engage in self-injury “are prone to concealment in order to avoid unwanted treatment” (p 820) Therefore, I examined additional relationships between secrecy and specific help-seeking sources Exploratory post hoc analyses indicated that secrecy is negatively associated with seeking help for both *NSSI injuries* (see Table 14) *NSSI urges* (see Table 15) across nearly every help source- both formal and informal This includes seeking help from a partner, friend, parent, other family member mental health provider, medical provider, and even online

discussion boards. Secrecy was also associated with greater endorsement of not seeking help from anyone.

The reason that secrecy is associated with help-seeking could be connected to fear of change and giving a coping mechanism that helps reduce negative and may even serve as a protective measure against suicidal attempts (Klonsky & Muehlenkamp, 2007, Laye-Gindhu, & Schonert-Reichl, 2005, Lloyd-Richardson et al, 2007, Nock & Prinstein, 2004, Swanell et al, 2008). This fear of lifestyle alteration is also a barrier for individuals in need of treatment for eating disorders (Hepworth & Paxton 2004). Thus, the role that stigma plays in help-seeking for individuals who engage in NSSI is not as important as the desire to avoid disclosure or conceal history of NSSI.

Table 14
Intercorrelations of Likelihood of Future Help-seeking for NSSI Injuries and Secrecy

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|--|--------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|------------|------------|-----|
| Item 1 Secrecy | 1 0 | | | | | | | | | | |
| Item 2 Seeking Help for Injury with Partner | - .18 | 1 0 | | | | | | | | | |
| Item 3 Seeking Help for Injury with Friend | - .17 | .35 | 1 0 | | | | | | | | |
| Item 4 Seeking Help for Injury with Parent | - .19 | .24 | .21 | 1 0 | | | | | | | |
| Item 5 Seeking Help for Injury with Other Relative | - .16 | .17 | .24 | .45 | 1 0 | | | | | | |
| Item 6 Seeking Help for Injury with Mental Health Prof | - .17 | .12 | .22 | .15 | .14 | 1 0 | | | | | |
| Item 7 Seeking Help for Injury with Phone Help Line | - .05 | .03 | .16 | .05 | .09 | .27 | 1 0 | | | | |
| Item 8 Seeking Help for Injury with Doctor/GP | - .19 | .00 | .10 | .04 | .14 | .40 | .20 | 1 0 | | | |
| Item 9 Seeking Help for Injury with Online Forum/Chat | - .10 | .16 | .23 | -.05 | .01 | .14 | .15 | .10 | 1 0 | | |
| Item 10 Seeking Help for Injury with Teacher | - .10 | .13 | .22 | .15 | .20 | .20 | .08 | .15 | .19 | 1 0 | |
| Item 11 Not Seeking Help for Injury from Anyone | .16 | -.24 | -.25 | -.14 | -.19 | -.30 | -.13 | .22 | .06 | .16 | 1 0 |

Note All significant coefficients are bolded

Table 15

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|--|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----|
| Item 1 Secrecy | 1 0 | | | | | | | | | | |
| Item 2 Seeking Help for Thoughts with Partner | - .17 | 1 0 | | | | | | | | | |
| Item 3 Seeking Help for Thoughts with Friend | - .20 | .41 | 1 0 | | | | | | | | |
| Item 4 Seeking Help for Thoughts with Parent | - .16 | .19 | .18 | 1 0 | | | | | | | |
| Item 5 Seeking Help for Thoughts with Other Relative | - .12 | .14 | .25 | .47 | 1 0 | | | | | | |
| Item 6 Seeking Help for Thoughts with Mental Health | - .13 | .14 | .26 | .11 | .15 | 1 0 | | | | | |
| Item 7 Seeking Help for Thoughts with Phone Line | - .14 | .11 | .22 | .05 | .11 | .31 | 1 0 | | | | |
| Item 8 Seeking Help for Thoughts with Doctor/GP | - .10 | .07 | .12 | .06 | .12 | .34 | .23 | 1 0 | | | |
| Item 9 Seeking Help for Thoughts with Online Forum | - .13 | .20 | .27 | -.01 | .03 | .19 | .22 | .14 | 1 0 | | |
| Item 10 Seeking Help for Thoughts with Teacher | - .07 | .09 | .27 | .13 | .18 | .18 | .13 | .13 | .20 | 1 0 | |
| Item 11 Not Seeking Help for Thoughts from Anyone | .16 | -.18 | -.18 | -.09 | -.12 | -.18 | -.10 | -.14 | -.01 | -.02 | 1 0 |

Intercorrelations of Likelihood of Future Help-seeking for NSSI Thoughts/Urges and Secrecy

Note All significant coefficients are bolded

Stigma and Psychological Distress

The present study also examined the role of stigma on psychological distress, and I hypothesized that this relationship would be mediated by secrecy. In comparison to studies that have examined both stigma and depressive symptoms (e.g., Link et al., 2002), participants in this study had a substantially higher mean CES-D score, indicating that the average participant in this study scored well above the cut-off of 16 used to screen for depression in the general population. Secrecy was expected to be related to psychological distress based on previous research (Luoma et al., 2006). A correlation revealed that secrecy and depression are, in fact, positively associated. As expected, a relationship was found between public stigma and psychological distress. This finding is in line with past studies confirming the association between symptoms of depression and perceived public stigma, across both young and older adults (Eisenberg et al., 2009, Friedl, Spltzl, & Aigner, 2008). Also, this study found that self-stigma was associated with psychological distress, a finding supported by previous studies (Austin et al., 2004, Moses, 2009b). However, no relationship was found between secrecy and distress when controlling for either stigma variable, and thus mediation was not found. Therefore, controlling for stigma, secrecy does not have a relationship with psychological distress, and stigma is a stronger and more salient construct in understanding psychological distress.

Limitations & Future Directions

There are several limitations to this study. First, the sample for this present study was self-selected. This self-selection biases results towards individuals who are comfortable with disclosing their self-harm history and interested in sharing their

experience without any incentives. As a side note, approximately 100 participants emailed the researchers requesting to receive the results of the study, further indicating the sentiment among this sample of a desire to learn more about NSSI rather than avoid information seeking. It is possible that individuals who have requested to receive the study results may also differ in terms of help-seeking characteristics from those who have not requested this information.

This study did not find evidence for public or self stigma predicting mental health or medical help-seeking among individuals who engage in NSSI, despite the fact that both forms of stigma were endorsed in this sample. However, this study did not include examination of mediators of this relationship that have previously been found to be significant, such as attitudes toward seeking help, or the individual's own attitude toward mental illness (Eisenberg et al., 2009, Vogel, Wade, & Hackler, 2007). Studies have shown that stigma negatively impacts attitudes toward seeking treatment (Vogel, Wade, & Hackler, 2007) and belief in treatment efficacy (Golberstein et al., 2008). An individual's attitudes towards treatment and beliefs that the treatment will be effective are associated with future help-seeking intentions, as in the case for general practitioners (Komti, Judd, & Jackson, 2006), and attitudes towards counseling account in part account for willingness to seek help (Vogel, Wade, & Hackler, 2007). This relationship is also accounted for by Theory of Reasoned Action (e.g. Ajzen & Fishbein, 1980, Fishbein & Ajzen, 1975) such that stigma may impact an individual's expectations and influence attitudes, which in turn alter behavioral intentions. Therefore, future studies could examine whether attitudes are important mediators of the stigma-help-seeking relationship for individuals who engage in NSSI.

Several other reasons may explain why this study did not find a relationship between stigma and help-seeking. For example, experience of stigma may vary depending on a variety of demographic factors such as SES, education, and country of origin, and these factors may also result in differences in help-seeking behavior (Abe-Kim et al., 2007, Golberstein et al., 2008, Moses, 2009, Pescosolido, Perry, Martin, McLeod, & Jensen, 2007). Additionally, seeking treatment may be related to factors such as mental health literacy, perception of need for help, and believing that treatment is effective (Fung et al., 2008, Hepworth & Paxton, 2007). These factors were not examined in the present study as moderators of the stigma-help-seeking relationship, but could be worthy of future research consideration.

It is also possible that satisfaction with treatment plays a role in the relationship between stigma and help-seeking, as satisfaction is closely tied to belief in treatment efficacy. The present study finds evidence for, at best, "neutral" satisfaction with professional help sources, which may provide explanation for why treatment is not sought, or if sought, not continued. Follow up studies could examine specifically why such low ratings are given. For example, does seeking professional help actually aide individuals with their NSSI concerns? As satisfaction may be dampened by lack of improvement in NSSI, in turn impacting belief in treatment and help-seeking efforts, more complex models may be necessary to understand help-seeking barriers among individuals who engage in NSSI.

This study also implemented adapted measures to be in reference to individuals who have a history of NSSI. As the questionnaires in the format used in the present study have not been previously validated, future studies should validate these measures to

ensure that these measures are sound for this population and that null findings are not due to measurement error or insufficient validity

In sum, seeking help for NSSI injuries and NSSI urges are two different concerns that are relevant to individuals with a history of self-harm. Across both concerns, treatment satisfaction is lower for medical staff than mental health staff, even in terms of mismatched concerns such as seeking help for injuries from a mental health provider. Satisfaction with past help-seeking is associated with future help-seeking, but overall satisfaction with professional treatment providers is, at best, “neutral.”

The concepts of public and self stigma, as well as secrecy, are relevant to individuals who engage in NSSI and these three constructs are positively associated. However, of the components from Modeling Labeling Theory tested in the present study, secrecy was found to be the most important construct in differentiating help-seeking behavior for NSSI. Neither public nor self stigma predicted professional help-seeking. In fact, public stigma was only associated with informal help-seeking, and self stigma was completely unrelated to help-seeking behavior.

This study found that two factors seem to be very important in terms of help-seeking: degree of desire to stop and secrecy. Degree of desire to stop self-harm is associated with only informal help-seeking for *NSSI injuries*, but is positively associated with help-seeking across professional and several forms of informal help for *NSSI urges*. Clearly, a barrier still exists between help-seeking and desire to stop, given that the vast majority of individuals in this study endorsed that they would like to stop engaging in self-harm at least some of the time. Future interventions aimed at increasing NSSI help-

seeking behavior may benefit from focusing on helping individual identify reasons they would want to stop engaging in self-harm, thereby increasing likelihood of professional help-seeking

Those who have never sought professional treatment for *NSSI urges* endorsed higher secrecy than those who have sought professional help. In addition to the independent relationship between secrecy and psychological distress, secrecy is negatively related to help-seeking for both *NSSI urges* and *NSSI injuries* across most forms of help-seeking and may be the most important component of help-seeking behaviors. Therefore, future research attempting to address the lack of help-seeking behavior among this population may need to focus on secrecy, addressing why individuals want to hide their history of self-harm and intervening on concealment behavior. Past research also indicates that secrecy can also increase over time, even across a span of just a few years (Link et al., 2002). Thus, factors such as length of time since initiation of secrecy may impact the progression of concealment behaviors and the effect of such concealment efforts. Lastly, examining secrecy among individuals who engage in *NSSI* may help explain the function and motivation of concealment behaviors as they relate to maintenance of self-harm and additional psychological distress.

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APPENDIX A
DEMOGRAPHICS

Please enter your age (in years) __

Please enter your birth date in the following format Month/ /Year [00/0000] [Enter response]

What is your gender? (select one)

- Female
- Male
- Transgender

What is your sexual orientation? (select one)

- Heterosexual/Straight
- Bisexual
- Gay/Lesbian
- Questioning/Unsure

Do you currently live in the USA? Yes/No

If no, what is your current country of residence? [Enter response]

Please select if you have ever been diagnosed with any of the following

- Depression
- Bipolar disorder
- Borderline Personality Disorder
- Schizophrenia
- Dissociative Identity Disorder
- Other _____

Please select if you have ever had a history of the following

- Anorexia
- Bulimia
- Overdosing
- Alcoholism
- Drug Addiction
- Attempted Suicide
- Stealing
- Gambling
- Sexually transmitted disease

APPENDIX B

DELIBERATE SELF-HARM INVENTORY

Gratz, K. (2001) Measurement of deliberate self-harm: Preliminary data on the Deliberate Self-Harm Inventory. *Journal of Psychopathology and Behavioral Assessment*, 23(4), 253-263. doi:10.1023/A:1012779403943

This questionnaire asks about a number of different things that people sometimes do to hurt themselves. Please be sure to read each question carefully and respond honestly. Often, people who do these kinds of things to themselves keep it a secret, for a variety of reasons. However, honest responses to these questions will provide us with greater understanding and knowledge about these behaviors and the best way to help people.

Please answer yes to a question only if you did the behavior intentionally, or on purpose, to hurt yourself. Do not respond yes if you did something accidentally (e.g., you tripped and banged your head on accident). Also, please be assured that your responses are completely confidential.

1. Have you ever intentionally (i.e., on purpose) cut your wrist, arms, or other area(s) of your body (without intending to kill yourself)? (circle one)

If yes,

How old were you when you first did this? [enter response in years]

How many times have you done this? [enter response]

When was the last time you did this? [enter response]

How many years have you been doing this? [enter response]

If you are no longer doing this, how many years did you do this before you stopped? [enter response]

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes/No

2. Have you ever intentionally (i.e., on purpose) burned yourself with a cigarette (without intending to kill yourself)? Yes/No

If yes,

How old were you when you first did this? [enter response in years]

How many times have you done this? [enter response]

When was the last time you did this? [enter response]

How many years have you been doing this? [enter response]

If you are no longer doing this, how many years did you do this before you stopped? [enter response]

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes/No

3 Have you ever intentionally (i.e., on purpose) burned yourself with a lighter or match (without intending to kill yourself)? Yes/No

If yes,

How old were you when you first did this? [enter response in years]

How many times have you done this? [enter response]

When was the last time you did this? [enter response]

How many years have you been doing this? [enter response]

If you are no longer doing this, how many years did you do this before you stopped?
[enter response]

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes/No

4 Have you ever intentionally (i.e., on purpose) carved words into your skin (without intending to kill yourself)? Yes/No

If yes,

How old were you when you first did this? [enter response in years]

How many times have you done this? [enter response]

When was the last time you did this? [enter response]

How many years have you been doing this? [enter response]

If you are no longer doing this, how many years did you do this before you stopped?
[enter response]

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes/No

5 Have you ever intentionally (i.e., on purpose) carved pictures, designs, or other marks into your skin (without intending to kill yourself)? Yes/No

If yes,

How old were you when you first did this? [enter response in years]

How many times have you done this? [enter response]

When was the last time you did this? [enter response]

How many years have you been doing this? [enter response]

If you are no longer doing this, how many years did you do this before you stopped?
[enter response]

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes/No

6 Have you ever intentionally (i.e., on purpose) severely scratched yourself, to the extent that scarring or bleeding occurred (without intending to kill yourself)? Yes/No

If yes,

How old were you when you first did this? [enter response in years]

How many times have you done this? [enter response]

When was the last time you did this? [enter response]

How many years have you been doing this? [enter response]

If you are no longer doing this, how many years did you do this before you stopped?
[enter response]

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes/No

7 Have you ever intentionally (i.e. on purpose) bit yourself, to the extent that you broke the skin (without intending to kill yourself)? Yes/No

If yes,

How old were you when you first did this? [enter response in years]

How many times have you done this? [enter response]

When was the last time you did this? [enter response]

How many years have you been doing this? [enter response]

If you are no longer doing this, how many years did you do this before you stopped? [enter response]

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes/No

8 Have you ever intentionally (i.e. on purpose) rubbed sandpaper on your body (without the intention to kill yourself)? Yes/No

If yes,

How old were you when you first did this? [enter response in years]

How many times have you done this? [enter response]

When was the last time you did this? [enter response]

How many years have you been doing this? [enter response]

If you are no longer doing this, how many years did you do this before you stopped? [enter response]

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes/No

9 Have you ever intentionally (i.e. on purpose) dripped acid onto your skin (without the intention to kill yourself)? Yes/No

If yes,

How old were you when you first did this? [enter response in years]

How many times have you done this? [enter response]

When was the last time you did this? [enter response]

How many years have you been doing this? [enter response]

If you are no longer doing this, how many years did you do this before you stopped? [enter response]

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes/No

10 Have you ever intentionally (i.e. on purpose) used bleach, comet, or oven cleaner to scrub your skin (without the intention to kill yourself)? Yes/No

If yes,

How old were you when you first did this? [enter response in years]

How many times have you done this? [enter response]

When was the last time you did this? [enter response]

How many years have you been doing this? [enter response]

If you are no longer doing this, how many years did you do this before you stopped?
[enter response]

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes/No

11 Have you ever intentionally (i.e. on purpose) stuck sharp objects such as needles, pins, staples, etc into your skin - not including tattoos, ear piercing, needles used for drug use, or body piercing- (without the intention to kill yourself)? Yes/No

If yes,

How old were you when you first did this? [enter response in years]

How many times have you done this? [enter response]

When was the last time you did this? [enter response]

How many years have you been doing this? [enter response]

If you are no longer doing this, how many years did you do this before you stopped?
[enter response]

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes/No

12 Have you ever intentionally (i.e. on purpose) rubbed glass into your skin (without the intention to kill yourself)? Yes/No

If yes,

How old were you when you first did this? [enter response in years]

How many times have you done this? [enter response]

When was the last time you did this? [enter response]

How many years have you been doing this? [enter response]

If you are no longer doing this, how many years did you do this before you stopped?
[enter response]

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes/No

13 Have you ever intentionally (i.e. on purpose) broken your own bones (without the intention to kill yourself)? Yes/No

If yes,

How old were you when you first did this? [enter response in years]

How many times have you done this? [enter response]

When was the last time you did this? [enter response]

How many years have you been doing this? [enter response]

If you are no longer doing this, how many years did you do this before you stopped?
[enter response]

Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment? Yes/No

14 Have you ever intentionally (i.e. on purpose) banged your head against something, to the extent that you caused a bruise to appear (without the intention to kill yourself)?

Yes/No

If yes,

How old were you when you first did this? [enter response in years]
How many times have you done this? [enter response]
When was the last time you did this? [enter response]
How many years have you been doing this? [enter response]
If you are no longer doing this, how many years did you do this before you stopped?
[enter response]
Has this behavior ever resulted in hospitalization or injury severe enough to require
medical treatment? Yes/No

15 Have you ever intentionally (i.e. on purpose) punched yourself, to the extent that you
caused a bruise to appear (without the intention to kill yourself)? Yes/No

If yes,

How old were you when you first did this? [enter response in years]
How many times have you done this? [enter response]
When was the last time you did this? [enter response]
How many years have you been doing this? [enter response]
If you are no longer doing this, how many years did you do this before you stopped?
[enter response]
Has this behavior ever resulted in hospitalization or injury severe enough to require
medical treatment? Yes/No

16 Have you ever intentionally (i.e. on purpose) prevented wounds from healing
(without the intention to kill yourself)? Yes/No

If yes,

How old were you when you first did this? [enter response in years]
How many times have you done this? [enter response]
When was the last time you did this? [enter response]
How many years have you been doing this? [enter response]
If you are no longer doing this, how many years did you do this before you stopped?
[enter response]
Has this behavior ever resulted in hospitalization or injury severe enough to require
medical treatment? Yes/No

17 Have you ever intentionally (i.e. on purpose) done anything else to hurt yourself that
was not asked about in this questionnaire? Yes/No

If yes, what did you do to hurt yourself?

How old were you when you first did this? [enter response in years]
How many times have you done this? [enter response]
When was the last time you did this? [enter response]
How many years have you been doing this? [enter response]
If you are no longer doing this, how many years did you do this before you stopped?
[enter response]
Has this behavior ever resulted in hospitalization or injury severe enough to require
medical treatment? Yes/No

APPENDIX C

PREVIOUS HELP-SEEKING EXPERIENCE SEEKING HELP FOR NSSI INJURY

Below is a list of people who you might seek help or advice from if you were experience difficulties with NSSI. Please answer whether you have ever seen the professional listed below for a **NSSI injury** and rate on average, how satisfied you were with your contacts with this help source

Have you ever consulted the following sources of help for an NSSI Injury

-Doctor Yes, No, Decline

If yes, on average, how satisfied were you with your contacts with this help source?

Very Dissatisfied

Dissatisfied

Neutral

Satisfied

Very Satisfied

-Nurse Yes, No, Decline

If yes, on average, how satisfied were you with your contacts with this help source?

Very Dissatisfied

Dissatisfied

Neutral

Satisfied

Very Satisfied

- Psychologist Yes, No, Decline

If yes, on average, how satisfied were you with your contacts with this help source?

Very Dissatisfied

Dissatisfied

Neutral

Satisfied

Very Satisfied

-Psychiatrist Yes, No, Decline

If yes, on average, how satisfied were you with your contacts with this help source?

Very Dissatisfied

Dissatisfied

Neutral

Satisfied
Very Satisfied

-Counselor Yes, No, Decline

If yes, on average, how satisfied were you with your contacts with this help source?

Very Dissatisfied
Dissatisfied
Neutral
Satisfied
Very Satisfied

-Social Worker Yes, No, Decline

If yes, on average, how satisfied were you with your contacts with this help source?

Very Dissatisfied
Dissatisfied
Neutral
Satisfied
Very Satisfied

-Online Support Group Yes, No, Decline

If yes, on average, how satisfied were you with your contacts with this help source?

Very Dissatisfied
Dissatisfied
Neutral
Satisfied
Very Satisfied

-Phone-based Crisis Line Yes, No, Decline

If yes, on average, how satisfied were you with your contacts with this help source?

Very Dissatisfied
Dissatisfied
Neutral
Satisfied
Very Satisfied

APPENDIX D

PREVIOUS HELP-SEEKING EXPERIENCE SEEKING HELP FOR NSSI THOUGHTS/URGES

Below is a list of people who you might seek help or advice from if you were experience difficulties with NSSI. Please answer whether you have ever seen the professional listed below for a **NSSI thoughts or urges** and rate on average, how satisfied you were with your contacts with this help source

Have you ever consulted the following sources of help with NSSI thoughts or urges

-Doctor Yes, No, Decline

If yes, on average, how satisfied were you with your contacts with this help source?

Very Dissatisfied

Dissatisfied

Neutral

Satisfied

Very Satisfied

-Nurse Yes, No, Decline

If yes, on average, how satisfied were you with your contacts with this help source?

Very Dissatisfied

Dissatisfied

Neutral

Satisfied

Very Satisfied

- Psychologist Yes, No, Decline

If yes, on average, how satisfied were you with your contacts with this help source?

Very Dissatisfied

Dissatisfied

Neutral

Satisfied

Very Satisfied

-Psychiatrist Yes, No, Decline

If yes, on average, how satisfied were you with your contacts with this help source?

Very Dissatisfied

Dissatisfied

Neutral

Satisfied
Very Satisfied

-Counselor Yes, No, Decline

If yes, on average, how satisfied were you with your contacts with this help source?

Very Dissatisfied
Dissatisfied
Neutral
Satisfied
Very Satisfied

-Social Worker Yes, No, Decline

If yes, on average, how satisfied were you with your contacts with this help source?

Very Dissatisfied
Dissatisfied
Neutral
Satisfied
Very Satisfied

-Online Support Group Yes, No, Decline

If yes, on average, how satisfied were you with your contacts with this help source?

Very Dissatisfied
Dissatisfied
Neutral
Satisfied
Very Satisfied

-Phone-based Crisis Line Yes, No, Decline

If yes, on average, how satisfied were you with your contacts with this help source?

Very Dissatisfied
Dissatisfied
Neutral
Satisfied
Very Satisfied

APPENDIX E:
GENERAL HELP-SEEKING QUESTIONNAIRE
MODIFIED FORM- MEDICAL HELP-SEEKING FOR NSSI

(GHSQ, Deane, Wilson, & Ciarrochi, 2001, Wilson, Dean, & Ciarrochi, 2005)

Below is a list of people who you might seek help or advice from if you were experiencing a problem. Please rate how likely it is that you would seek help from each of these people for an NSSI related injury.

Partner (e.g. significant boyfriend or girlfriend)

| | | | | | |
|--------------------|---|---|---|---|------------------|
| Extremely Unlikely | | | | | Extremely Likely |
| 1 | 2 | 3 | 4 | 5 | |

Friend (not related to you)

| | | | | | |
|--------------------|---|---|---|---|------------------|
| Extremely Unlikely | | | | | Extremely Likely |
| 1 | 2 | 3 | 4 | 5 | |

Parent

| | | | | | |
|--------------------|---|---|---|---|------------------|
| Extremely Unlikely | | | | | Extremely Likely |
| 1 | 2 | 3 | 4 | 5 | |

Other relative/family member

| | | | | | |
|--------------------|---|---|---|---|------------------|
| Extremely Unlikely | | | | | Extremely Likely |
| 1 | 2 | 3 | 4 | 5 | |

Mental health professional (e.g. school counselor, psychologist, psychiatrist)

| | | | | | |
|--------------------|---|---|---|---|------------------|
| Extremely Unlikely | | | | | Extremely Likely |
| 1 | 2 | 3 | 4 | 5 | |

Phone help line (e.g. 1800 Don't Cut)

| | | | | | |
|--------------------|---|---|---|---|------------------|
| Extremely Unlikely | | | | | Extremely Likely |
| 1 | 2 | 3 | 4 | 5 | |

Family doctor/General Practitioner

| | | | | | |
|--------------------|---|---|---|---|------------------|
| Extremely Unlikely | | | | | Extremely Likely |
| 1 | 2 | 3 | 4 | 5 | |

Teacher (school teacher, adviser)

Extremely Unlikely

1

2

3

4

Extremely Likely

5

Someone else not listed above (please describe who this was) _____

Extremely Unlikely

1

2

3

4

Extremely Likely

5

I would not seek help from anyone

Extremely Unlikely

1

2

3

4

Extremely Likely

5

APPENDIX F

GENERAL HELP-SEEKING QUESTIONNAIRE MODIFIED FORM- MENTAL HEALTH HELP-SEEKING FOR NSSI

(GHSQ, Deane, Wilson, & Ciarrochi, 2001, Wilson, Dean, & Ciarrochi, 2005)

Below is a list of people who you might seek help or advice from if you were experiencing a problem. Please rate how likely it is that you would seek help from of these people about urges or thoughts of NSSI.

Partner (e.g. significant boyfriend or girlfriend)

| | | | | | |
|--------------------|---|---|---|---|------------------|
| Extremely Unlikely | | | | | Extremely Likely |
| 1 | 2 | 3 | 4 | 5 | |

Friend (not related to you)

| | | | | | |
|--------------------|---|---|---|---|------------------|
| Extremely Unlikely | | | | | Extremely Likely |
| 1 | 2 | 3 | 4 | 5 | |

Parent

| | | | | | |
|--------------------|---|---|---|---|------------------|
| Extremely Unlikely | | | | | Extremely Likely |
| 1 | 2 | 3 | 4 | 5 | |

Other relative/family member

| | | | | | |
|--------------------|---|---|---|---|------------------|
| Extremely Unlikely | | | | | Extremely Likely |
| 1 | 2 | 3 | 4 | 5 | |

Mental health professional (e.g. school counselor, psychologist, psychiatrist)

| | | | | | |
|--------------------|---|---|---|---|------------------|
| Extremely Unlikely | | | | | Extremely Likely |
| 1 | 2 | 3 | 4 | 5 | |

Phone help line (e.g. 1800 Don't Cut)

| | | | | | |
|--------------------|---|---|---|---|------------------|
| Extremely Unlikely | | | | | Extremely Likely |
| 1 | 2 | 3 | 4 | 5 | |

Family doctor/General Practitioner

| | | | | | |
|--------------------|---|---|---|---|------------------|
| Extremely Unlikely | | | | | Extremely Likely |
| 1 | 2 | 3 | 4 | 5 | |

Teacher (school teacher, adviser)

Extremely Unlikely

1

2

3

4

Extremely Likely

5

Someone else not listed above (please describe who this was) _____

Extremely Unlikely

1

2

3

4

Extremely Likely

5

I would not seek help from anyone

Extremely Unlikely

1

2

3

4

Extremely Likely

5

APPENDIX G
DESIRE TO STOP NSSI

Please indicate how often you would like to stop engaging in NSSI

| Never | Rarely | Sometimes | Often | Always |
|-------|--------|-----------|-------|--------|
| 1 | 2 | 3 | 4 | 5 |

APPENDIX H

PUBLIC STIGMA- PERCEIVED DEVALUATION AND DISCRIMINATION

(Link, Stuenkel, Neese-Todd, Asmussen, & Phelan, 2002)

- | | | | | |
|----|--|----------|-------|----------------|
| 1 | Most people would accept a person with a history of NSSI as a close friend (R) | | | |
| | Strongly Disagree | Disagree | Agree | Strongly Agree |
| 2 | Most people believe that a person with a history of NSSI is just as trustworthy as the average citizen (R) | | | |
| | Strongly Disagree | Disagree | Agree | Strongly Agree |
| 3 | Most people would accept a fully recovered person with a history of NSSI as a teacher of young children in a public school (R) | | | |
| | Strongly Disagree | Disagree | Agree | Strongly Agree |
| 4 | Most people believe that entering a mental hospital is a sign of personal failure ***** | | | |
| | Strongly Disagree | Disagree | Agree | Strongly Agree |
| 5 | Most people would not hire a person with a history of NSSI to take care of their children, even if he or she had been well for some time | | | |
| | Strongly Disagree | Disagree | Agree | Strongly Agree |
| 6 | Most people think less of a person who has a history of NSSI | | | |
| | Strongly Disagree | Disagree | Agree | Strongly Agree |
| 7 | Most employers will hire a person with a history of NSSI if he or she is qualified for the job (R) | | | |
| | Strongly Disagree | Disagree | Agree | Strongly Agree |
| 8 | Most employers will pass over the application of a person with a history of NSSI in favor of another applicant | | | |
| | Strongly Disagree | Disagree | Agree | Strongly Agree |
| 9 | Most people in my community would treat a person with a history of NSSI just as they would treat anyone (R) | | | |
| | Strongly Disagree | Disagree | Agree | Strongly Agree |
| 10 | Most young men would be reluctant to date a woman who has a history of NSSI | | | |
| | Strongly Disagree | Disagree | Agree | Strongly Agree |
| 11 | Once they know a person has a history of NSSI, most people will take his or her opinions less seriously | | | |
| | Strongly Disagree | Disagree | Agree | Strongly Agree |

APPENDIX I

SELF STIGMA

(Austin, Macleod, Dunn, Shen, & Perkins, 2004)

| | | | | | |
|---|---|--------|-----------|---------|--------|
| 1 | How often do you feel different from other people your age because you have a history of NSSI? | | | | |
| | Never | Rarely | Sometimes | Usually | Always |
| 2 | How often do you feel people may not like you if they knew you have a history of NSSI? | | | | |
| | Never | Rarely | Sometimes | Usually | Always |
| 3 | How often do you feel that people will not want to be friends with you if they knew you have a history of NSSI? | | | | |
| | Never | Rarely | Sometimes | Usually | Always |
| 4 | How often do you worry that other people are uncomfortable with you because you have a history of NSSI? | | | | |
| | Never | Rarely | Sometimes | Usually | Always |
| 5 | How often do you feel embarrassed about your history of NSSI? | | | | |
| | Never | Rarely | Sometimes | Usually | Always |

APPENDIX J

COPING WITH STIGMA- SECRECY

(Link, Stuenkel, Neese-Todd, Asmussen, & Phelan, 2002)

- | | | | | | |
|---|---|-------------------|----------|-------|----------------|
| 1 | If you had a close relative who had a history of NSSI, you would advise him or her not to tell anyone about it | Strongly Disagree | Disagree | Agree | Strongly Agree |
| 2 | If you were in treatment for NSSI, you would worry about certain people finding out about your treatment | Strongly Disagree | Disagree | Agree | Strongly Agree |
| 3 | The best thing to do is to keep your history of NSSI a secret | Strongly Disagree | Disagree | Agree | Strongly Agree |
| 4 | There is no reason for a person to hide the fact that he or she has a history of NSSI at one time (R) | Strongly Disagree | Disagree | Agree | Strongly Agree |
| 5 | In view of society's negative attitudes toward people with NSSI, you would advise people with NSSI to keep their history of NSSI a secret | Strongly Disagree | Disagree | Agree | Strongly Agree |
| 6 | In order to get a job a person will have to hide his or her history of NSSI | Strongly Disagree | Disagree | Agree | Strongly Agree |
| 7 | You encourage other members of your family to keep your NSSI history a secret | Strongly Disagree | Disagree | Agree | Strongly Agree |
| 8 | You believe that a person who has recovered from NSSI experienced earlier in life should not tell other people about it | Strongly Disagree | Disagree | Agree | Strongly Agree |
| 9 | When you meet people for the first time, you make a special effort to keep the fact that you have a history of NSSI to yourself | Strongly Disagree | Disagree | Agree | Strongly Agree |

APPENDIX K**CENTER FOR EPIDEMIOLOGIC STUDIES DEPRESSION SCALE**

(CES-D, Randloff, 1977)

The 20 items below refer to how you have felt and behaved during the last week. Please select the answer that best reflects how each statement applies to you. This test will only be scored correctly if you answer each one of the questions.

1 I was bothered by things that don't usually bother me

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

2 I did not feel like eating, my appetite was poor

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

3 I felt that I could not shake off the blues even with the help of my family or friends

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

4 I felt that I was just as good as other people

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

5 I had trouble keeping my mind on what I was doing

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

6 I felt depressed

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

7 I felt everything I did was an effort

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

8 I felt hopeful about the future

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

9 I thought my life had been a failure

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

10 I felt fearful

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

11 My sleep was restless

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

12 I was happy

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

13 I talked less than usual

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

14 I felt lonely

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

15 People were unfriendly

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)

- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

16 I enjoyed life

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

17 I had crying spells

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

18 I felt sad

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

19 I felt that people disliked me

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

20 I could not get "going"

- Rarely or none of the time (<1 day)
- Some or a little of the time (1-2 days)
- Occasionally or a moderate amount of the time (3-4 days)
- Most or all of the time (5-7 days)

APPENDIX L

LETTER TO SITE MODERATORS



COLLEGE OF SCIENCES
DEPARTMENT OF PSYCHOLOGY

Norfolk, Virginia 23529-0267
Phone (757) 683-4439 • Fax (757) 683-5087
EMail psycdept@odu.edu

Dear moderator of _____,

My name is Tatyana Kholodkov, and I am working on research with Dr. James M. Henson at Old Dominion University. I am conducting a study to raise awareness of the barriers faced by individuals struggling with self-harm. I believe that self-injury is frequently misunderstood, and I think it's great that this site is available for individuals seeking support with self-harm.

I am contacting you to request permission to post a link to the research survey on your website. I would like to invite users on your site to share with me their experiences related to self-injury so that the issues faced by individuals who engage in self-injury can be better understood and disseminated to the scientific community. Once the study is complete, I will have a summary of our findings available for your users to read and respond to.

This study is open to individuals aged 18 years and older. We are taking special consideration in case a participant feels triggered by offering supportive information at the beginning and end of the survey, including 1-800 Don't Cut and website links. No identifying information will be collected and participants cannot be traced to their responses to the survey. This study has been approved by the Institutional Review Board (IRB) at Old Dominion University and follows all ethical guidelines as outlined by the American Psychological Association.

I am happy to provide you with additional information regarding this project and the questionnaires that will be used. If there are any questions I can answer, please do not hesitate to contact me at tkhol001@odu.edu. Additionally, questions can be directed to my research advisor, Dr. James M. Henson, at JHenson@odu.edu.

I look forward to hearing from you soon.

Sincerely,

Tatyana Kholodkov
Graduate Student
Old Dominion University
tkhol001@odu.edu
(858) 761-2841

VITA

EDUCATION

- 2011** **Masters of Science, Experimental Psychology (anticipated)**
Old Dominion University, Norfolk VA
- 2008** **Alcohol and Other Drug Studies Courses**
San Diego City College, San Diego CA
- 2007** **Bachelor of Arts, Psychology**
Concentration Therapeutic and Community Psychology
Point Loma Nazarene University, San Diego CA

RESEARCH INTERESTS

- Non-Suicidal Self-Injury and Suicide
- Emotion Regulation
- Psychopathology and Personality Disorders
- Health-risk behaviors

AWARDS AND HONORS

- 2010** Harrell Scholar/ Delta Sigma Lambda Scholarship
Scholarship for women 25+ based on academic excellence
and character, \$1914
- 2010** Virginia Psychological Association Convention
Best Graduate Student Paper Award

RESEARCH PUBLICATIONS

- Pearson, M, **Kholodkov, T** , Henson, J M , & Impett, E (2010) *Pathways to Early Coital Debut for Adolescent Girls: A Recursive Partitioning Analysis* In press, Journal of Sex Research
- Lewis, R , **Kholodkov, T** , & Derlega, V (2010) *Still Stressful After All These Years: An Examination of Lesbians' Minority Stress* In press, Journal of Lesbian Studies

PROFESSIONAL AFFILIATIONS

International Society for the Study of Self-Injury (ISSS), Virginia Psychological Association (VPA), Association for Psychological Science (APS), Association for Behavioral and Cognitive Therapy (ABCT), American Psychological Association (APA)